MAGNIZON
GREEN ENERGY

www.magnizon.com

SOLAR PANELS

Affordable Solar Power for Generations

magnizon magnizon1 +971 56 63 58098 @magnizon1 magnizon

INTRODUCTION

Magnizon is a ISO9001:2015 & ISO14001:2015 certified global manufacturing firm with strong focus on Product engineering, research and development, production, sales and services in the field of green energy power product lines. Production range includes of PV solar module both poly and mono with industry best standards and quality. Our PV modules are produced by 100% automatic(advanced robotic) production lines and approved by TUV, IEC, CE, CEC, CQC and FIDE. Team with top R&D talent with 20+ years of multinational corporate experience and assembled senior marketing, product and sales teams who live by the MNC spirit of “Professionalism, Integrity, Innovation and Win-Win”. From our base in Dubai-UAE we serve markets across Middle East, Africa and central Asia. Our products are supplied, deployed and working successfully with 100% customer satisfaction across 32 countries.

MAGNIZON
GREEN ENERGY

CHOOSING **MAGNIZON**, YOU GET BETTER ENGINEERED PRODUCTS, YOU ALSO GET OUR PROVEN RELIABILITY, OUTSTANDING CUSTOMER SERVICE AND THE ASSURANCE OF OUR 25-YEARS LIMITED WARRANTY.

KEY FEATURES:

- Maximum system voltage: 1000v(Option of 1500V with prior request)
- Operating temperature range: -40DegC to 85DegC
- Surface maximum load capacity: 200kgs/Sq.m
- Built in IP67 Rated junction box with 3 bypass diodes
- Built in +ve & -ve cables lengths of 900mm
- Positive power tolerance(0-3%) to ensure the high reliability of power output
- Solar cells made in : Germany/Japan/Taiwan (options to choose by customer)
- Easy installation and maintenance with compatibility to industry standard inverters and mounting system
- Anti-reflective, hydrophobic layer of module surface(proprietary 800°C online coating technology) improves light absorption and reduces surface dust
- Excellent performance under low light environments(mornings, evenings and cloudy days) create better kWh/kW ratio and produce average 5-6% more yield
- Special PV Module Insurances by world leading insurance company guarantees the benefit of PV investors and users
- Junction box and bypass diodes guarantee the module free of overheating and “hot spot effect”
- IEC 61215, IEC 61730-1/2, IEC 61701, CE, EMC, ISO 9001:2015, ISO 14001:2015 & ROHS compliance

PRODUCT CHARACTERISTICS:

High efficiency crystalline PV modules is applicable to residential and public roof tops and ground mounting PV power stations

Main bus bars PV cells (5BB), more uniform current collecting ability, decrease current self-consumption, more beautiful product appearance

Antireflective glass not only increases light absorption, but also reduces the power loss by its self-cleaning function under rainy environment

Outstanding week light power generating performance, well suitable for cloudy and rainy environments

Excellence mechanical performance with 2400Pa wind load and 5400Pa snow load with 2xIEC standard test performance design

Certified anti salt-mist, anti-ammonia corrosion performance by TUV

Optimized current classification to improve the system power output

Excellent PID free performance

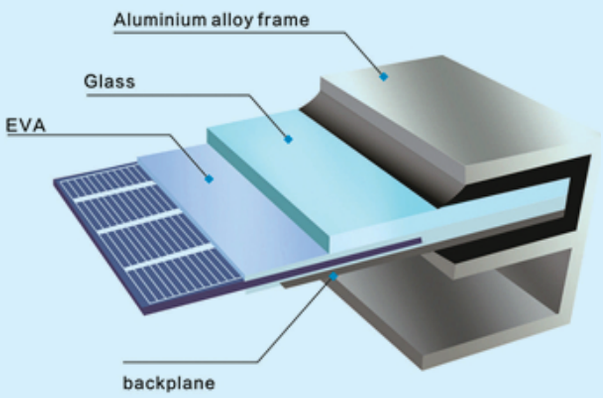
Production process using World class auxiliary materials

EVA

- Excellent anti-PID and UV- gaining properties
- Excellent durability, such as weather resistance, high-temperature, high-humidity and UV light resistance.
- Excellent long term adhesion to glass, metal and polymer back sheet.
- Excellent light transmittance and transparency.
- Good maneuverability during lamination process

SOLAR CELL

- Magnizon has established a strict solar cell procurement system in order to ensure the quality and efficiencies of solar cells.
- World class solar cell sources from Germany/ Japan/Taiwan/China gives our customers a flexibility to select products based on the budgets
- 5BB, Class A+ cells with highest efficiency in the industry
- Excellent resistance PID attenuation performance
- Anti PID-Solar cells



BACKPLANE

- Tetra-fluorine back at low water vapor transmittance to ensure the reliability of components and the stability in harsh environment
- High resistance to heat and humidity
- Excellent UV Blocking
- Excellent partial discharge
- High Inner Layer Reflectivity
- High Water Barrier
- Structure: Multi-layer, FFC or PVDF/Adhesive/PET/FFC

GLASS

- Reliable quality and high transparency
- Low Iron Tempered Glass
- Excellent scratch resistance
- Surface of the glass using closed-cell structure of the nano-quoting
  to improve the reliability and antifouling performance
- Anti-acid: Transmittance Loss less than 1%
- Salt Spray: Transmittance Loss less than 1%
- Damp Heat test (double 85) : Module Max Power Loss less than 5%
- Exposure to UV Light Module Max Power Loss less than 3%

JUNCTION BOX

- Procurement from First class diode suppliers to reduces the probability of occurrence of hot spots
- Using potting junction box design to ensure a good seal performance
- True IP67 junction box made with fire retardant polymers
- TUV certified, UV rated pure copper cables and connectors

ALUMINIUM ALLOY FRAME

- High resistance to salt and ammonia corrosion performance.
- Excellent surface treatment technology, higher line density components ensures excellent corrosion resistance and mechanical strength

Product Quality Process & Warranty

QUALITY TEST & PROCESS

- Before shipping out our products, we test every single solar modules using state-of-the art testing facilities and internationally proven test methods and procedures.
- QA tests using cutting-edge equipment such as solar irradiance simulator, mechanical load tester, and electroluminescence (EL) tester.
- Infrared cameras are constantly used to supervise the testing labs' temperature and humidity.

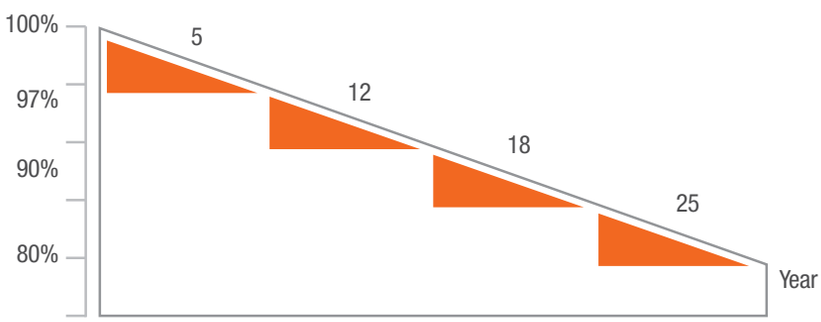
- When packaging, all our solar modules and cells are classified and sorted according to their current characteristics and all the packages are special designed that enable our products to be free of dampness, rust, moisture, erosion and shock.
- Our products are also independently tested by global renowned testing facilities including TUV Rheinland & TUV Nord etc.

ENVIRONMENTAL ADAPTABILITY TEST

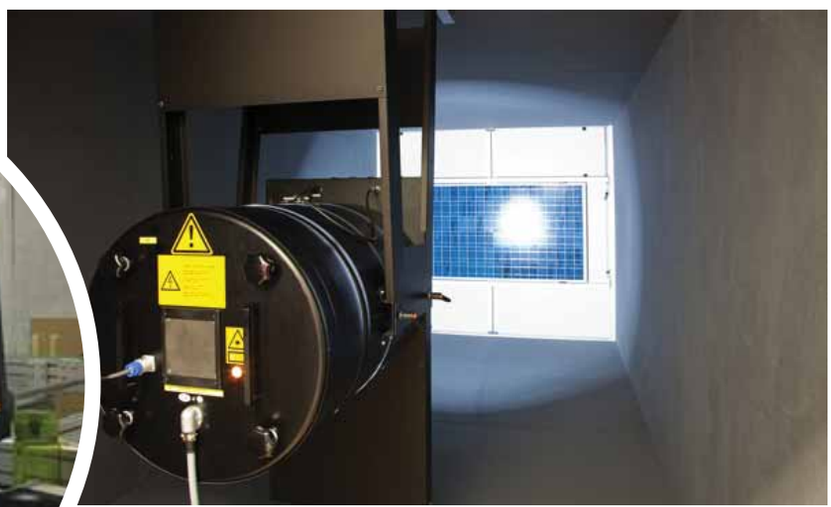
- Ammonia resistance test, resistance to salt spray test, So2 resistance test, resistance to dust test
- Adaptation to environment test: Dry and hot weather testing, hot and humid climate test, cold weather testing

LONG TERM RELIABILITY TEST

- Mechanical load test 5400PA to 10000PA (2x IEC standard requirement), HAST IEC test temperature 85deg C, RH 85% to temperature 121deg C and three times the air pressure RH100%
- Limit testing at 3times IEC standard
- 100% automation lines and independent production to ensure the highest quality and reliability



Linear power output guarantee brought additional value



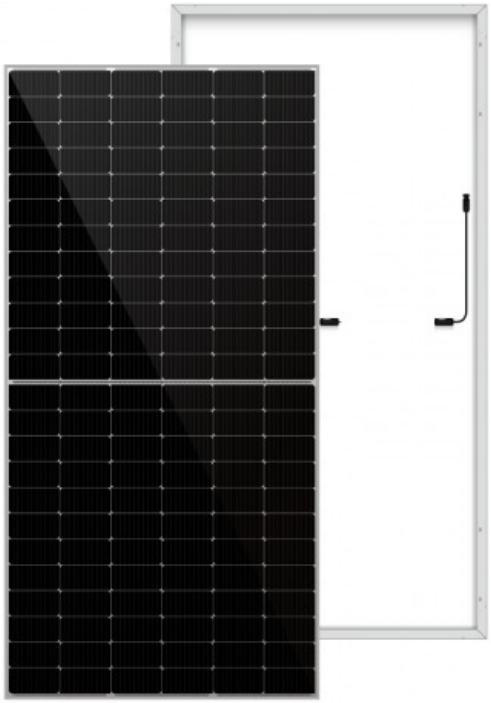
MAGNIZON
GREEN ENERGY

15 Years
Quality Warranties

25 Years
Power Warranties

15 Years Material & Workmanship Guarantee

- 95% power output guarantee for 5 years.
- 90% power output guarantee for 10 years.
- 80% power output guarantee for 25 years



MSM72X10-500w-550w

Monocrystalline PV Module

First-class solar panel warranty Reliable quality

- 15-Year material & technology warranty
- 25-Year linear power output warranty
- Standard linear power output guarantee
- Max Module Efficiency21.50%.

Product Characteristics

- More Power Generation: Larger size of light receiving area and higher module conversion efficiency
- 10 Bus bar Technology: Higher power collection density improves power generation
- Stable Generation Performance Guaranteed 0~+5W positive tolerance & slower power attenuation:first year 2%, 0.55% per year from 2-25 year.
- Higher Power Gains and Lower Losses: Excellent low irradiance performance and low shadow loss
- Process Optimized : L-risk of hot spot and stronger anti-PID ablity
- Strong Environmental Adaptability and Great Durability:Certified by Dust-Sand, Salt-Mist, Ammonia etc. weather resistance tests & enhanced mechanical load: wind load (2400 Pascal) and snow load (5400 Pascal)

STC-ELECTRICAL CHARACTERISTICS

Module Type	**MSM72X10-500 to MSM72X10-550**						
Model Number	**MSM72X10-500**	**MSM72X10-520**	**MSM72X10-530**	**MSM72X10-535**	**MSM72X10-540**	**MSM72X10-545**	**MSM72X10-550**
Maximum Power (Pmax)	500W	520W	530W	535W	540W	545W	550W
Open-circuit Voltage (Voc)	49.0W	49.2W	49.4W	49.6W	49.8W	50W	50.2W
Maximum Power Voltage (Vmp)	41.2V	41.4V	41.6V	41.8V	42V	42.2V	42.4V
Short-circuit Current (Isc)	13.42V	13.48V	13.54V	13.6V	13.66V	13.72V	13.78V
Maximum Power Current (Imp)	12.62A	12.68A	12.74A	12.8A	12.86A	12.91A	12.97A
Module Efficiency(%)	20.33%	20.52%	20.72%	20.91%	21.11%	21.30%	21.50%
Power Tolerance	0～+5W						
Temperature Coefficient of Isc	0.05%/℃						
Temperature Coefficient of Voc	—0.31%/℃						
Temperature Coefficient of Pmax	—0.35%/℃						
Standard Test Environment	Irradiance 1000W/m², Cell Temperature 25℃, Spectrum AM 1.5						

OPERATING PARAMETERS

Maximum system voltage	1000W 1500V DC
Operating temperature	-40 - 85C
Maximum series fuse rating	25A
Snowload frontside	5400Pa
Wind load frontside	2400Pa
Normal operating cell temperature	45C 2C
Application level	Class A

MECHANICAL SPECIFICATION

Cells Type **Mono 182x91mm**	Dimension(LxWxT) **2256x1133x35mm**
Weight **29kg**	Packing **31pcs/pallet, 620pcs/40HQ**
Output Cable (including connector)	4.0mm2. 300/400mm in length length can be customized
No of Cells	144(6x24)
Glass	3.2mm High Transmission, AntireflectionCoating
Junction box	IP68, 3Bypass Dodes
Connector	MC4 Compatible

APPLICATIONS

If you are considering Magnizon solar PV technologies for your home, business, remote cabin, or farm, it is important to understand the key differences between grid-tied and on-grid systems. Installing solar panels isn't as simple as slapping cells on a rooftop. You'll need to install additional wiring, and panel placement is key to building an efficient system.

ON-GRID/OFF-GRID UTILITY


RESIDENTIAL ROOF TOP SYSTEMS


TELECOM & BTS SOLUTIONS

Photovoltaic systems are more efficient not only from an economic and financial perspective, but also from a convenient one. As the diesel generators need close monitoring and continuous refuelling which has also burdened mobile operators with additional costs of reaching out to these remote sites, it's feasible to replace them with photovoltaic systems with low operating cost and easy monitoring.




WATER PUMPING STATIONS

Agriculture solar water systems are now more affordable and efficient than ever before! With Magnizon Solar Powered Water Pumping Station you would save or eliminate fuel and maintenance costs with no inverters or batteries required and increased pump reliability with no grid interconnection required. It runs your existing 3 phase 240 volt or 480 pump up to 300 horsepower with submersible or surface pumping. Variable frequency drive soft starts the motor and automatically adjusts to available light conditions.


SOLAR LIGHTING SYSTEMS

Wide ranges of Magnizon solar panels starting from 5Wp to 330Wp are suitable for various solar lighting systems. These solar lighting systems are used for various applications such as stadium lighting, street lighting, path way lighting, garden lighting and warning lighting for extra tall buildings.

COMMERCIAL APPLICATIONS

MAGNIZON solar panels are suitable till 500MW with various industrial needs or solar power generation stations. Unique technical feature and high reliable products with highest operating eciency ensures the ROI less than 4 years and operational life span of 25 years.

SECURITY, SURVEILLANCE AND MOBILE POWER SYSTEMS

The “WATTS ON WHEELS” concept is used in providing security in remote sites through solar powered mobile security and surveillance trailers. RV vehicles with panels mounted on top provide mobile services including mobile offices, schools, hospitals and health care services in areas without reliable power.

MAGNIZON GREEN ENERGY

SOLAR POWERED TRAFFIC SIGNALING SYSTEMS AND ATMS

As these LED based signal lights consume 90% less energy, it makes system practically viable to operate traffic signals maintenance free on Solar Power. Municipalities looking for a reliable & cost effective way to power traffic lights can turn to remote solar energy systems to keep roadway infrastructure up and running during all conditions. The solar powered ATMs have been established in places where power provision may not be available. It uses MPPT technology with a two-day lithium/ deep cycle gel battery backup.

ADVERTISING BILLBOARD POWER SUPPLIES

Magnizon Solar panels can be mounted directly to any billboard structure or it can be pole-mounted a short distance away from the structure. By investing in a Solar Billboard Lighting System, you can generate your own free solar energy and cash in on a variety of benets, including:

1. Long-term Protection from Rising Utility Rates
2. Higher Advertising Value
3. The Pride of Being Environmentally Responsible

MAGNIZON
GREEN ENERGY

info@magnizon.com www.magnizon.com

We conceptualize a unique way simplifying and customizing the products, at the same time ensuring best possible and optmized techno-commercial solutions to our customers.

Magnizon has a policy of continious improvement.

Specificatios are subject to change without notice. Photos may change slightly from final products.

Authorised Distributor :

magnizon | magnizon1 | +971 56 63 58098 | @magnizon1 | magnizon

ON-GRID
SOLAR INVERTERS

MAGNIZON
GREEN ENERGY

www.magnizon.com

Free power monitoring apps

MAGNIZON
GREEN ENERGY

INTRODUCTION

MAGNIZON is a ISO9001:2015 & ISO14001:2015 certified global manufacturing firm with strong focus on Product engineering, research and development, production, sales and services in the field of green energy power product lines. Team with top R&D talent with 20+ years of home and abroad, and assembled senior marketing, product and sales teams who live by the corporate spirit. From our base in Dubai-UAE we serve markets across Middle East, Africa and central Asia. Magnizon range of products being supplied, deployed and working successfully across 32 countries with 100% customer satisfaction.

Magnizon PV Inverter owns multiple patents in the structural design, current regulation, driver circuitry, efficiency improvement and process innovation, etc. We are one of few top industry leader for conversion efficiency, input voltage range, MPPT adaptability and other key performances. Our original ECO mode enables intelligent switching among high-efficiency, low power consumption and low light modes, which fast tracks sunlight changes and significantly improves efficiency and overall generating capacity.

An integrated unique aluminum die-casting process which extends inverters life to 25 years. All key components of inverters are supplied by internationally reputed brands who are known for reliability and trust. Product quality is the lifeline of Magnizon , hence all our OG series units complies with various IEC standards certified by TUV Rheinlander. All our inverters easy to install and transport, smallest in size and the lightest in weight among the similar capacities in the industry with Great value for money.

info@magnizon.com www.magnizon.com

magnizon
magnizon1
+971 56 63 58098
@magnizon1
magnizon

PRODUCT HIGHLIGHTS

OG-2K to 30KW upto 5MW

- Max efficiency 98.0%, European efficiency 97.2%
- Intelligent MPPT technology with self-studying capability
- Wide input voltage range (70V-1000V)
- APP designed for Bluetooth connectivity on smartphone
- Die-cast aluminum enclosure

OG-50K to 90K upto 10MW

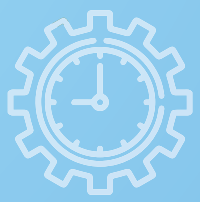
- Max efficiency 99%, European efficiency 98.5%.
- Smart HE (High Efficiency) technology
- 120% over-configuration capacity, 110% overload capacity
- Providing“ Zero Voltage Ride Through” technology
- PID module inside
- More than 25 years of life span
- Transformer-less design and compact in size
- Good cooling system and safety design

OG-MC & MX series upto 100MW

- System with strong compatibility, easy to extend
- Good cooling system and safety design
- MPPT efficiency > 99.9%
- Maximum efficiency > 98.7%
- Euro. efficiency > 98.5%
- Standby(night time) losses<10W
- Redundancy control circuits designed
- Reactive power adjustable
- Unique Zero Voltage Ride Through (ZVRT) function
- Anti-islanding and output abnormal voltage protection
- Advanced DSP Control makes data more accurate
- Active power adjustable continuous full range (0~100%)
- Support a variety of communication interfaces

SMART TOOLS

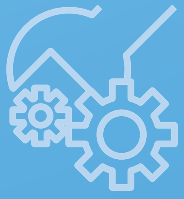
- Centered on Cloud server
- Intelligent Cloud Monitoring System
- Best suited for residential PV power station, business and industrial rooftop power station, farm and fish farm solar sharing PV power station and large ground-mounted power station system
- Allowing customers to monitor the operation of PV power station system anytime and anywhere
- RS232, RS485, GPRS, MODBUS, WIFI com-protocols with iOS/ Aandroid/Web based free app



HIGH EFFICIENCY

HIGHLY RELIABILE

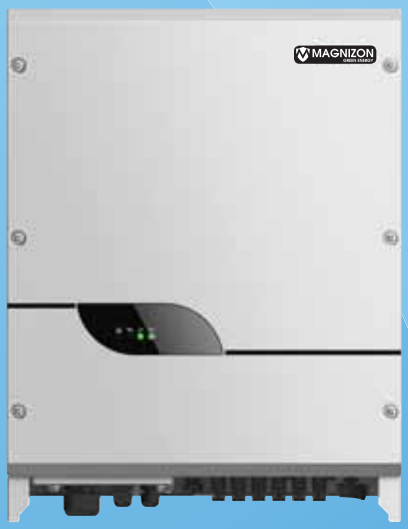
SMART & INTELLIGENT



EASY MAINTENANCE

OG SERIES

1-ph 220/230/240V AC, 50/60Hz, Grid Tie string inverters from 2KW to 5KW.



HIGH PERFORMANCE GRID-TIE INVERTERS

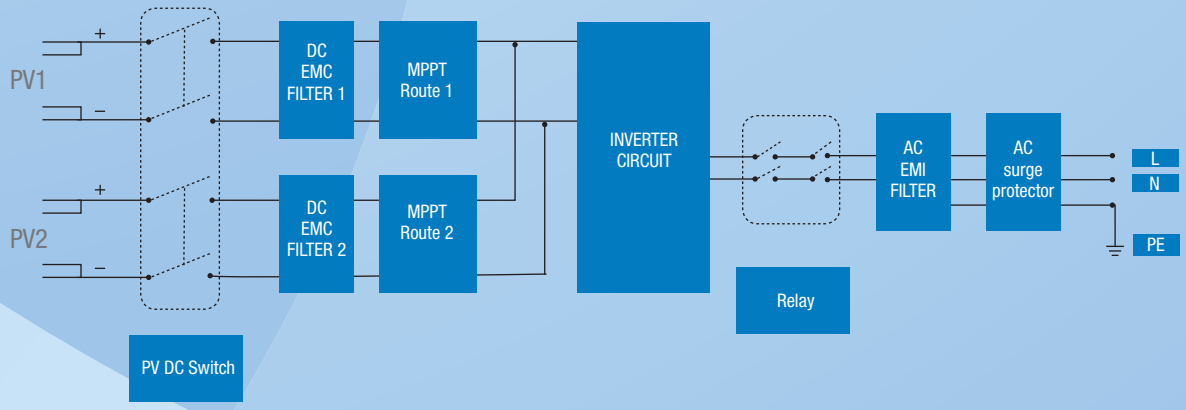
- From 2KW to 5KW
- Wide PV input voltage range
- Rapid MPPT tracking technology
- Superior PV energy harvest
- Transformers less design with higher operation efficiency
- Excellent natural thermal design
- High over load capability under most ambient conditions up to 60deg C
- Product design life of 25 years
- 5/10/15/20years of warranty

FULL DATA DISPLAY AND COMMUNICATIONS

- Customized LCD display
- System status at a glance with Bright LED indicator
- Web/iOS/Android based power monitoring software
- Big-Data analysis based power plant monitoring system
- High speed RS-485 & Wifi communications port
- Optional 4G based GPRS module
- Remote monitoring and firmware upgrades

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC



SPECIFICATIONS

MODEL	OG2000-SM	OG3000-SM	OG4000-DM	OG5000-DM
INPUT (DC)				
Max. DC input power	2200W	3300W	4400W	5500W
Max.DC input voltage	600Vdc			
Max. Input Current	12.5A	12.5A	20.8A (2x10.4A)	20.8A (2x10.4A)
MPPT tracking voltage range	70~580Vdc			
MPPT operating voltage range (full load)	200-520V	240-520V	200-520V	240-520V
Number of MPPT tracking/PV strings	1/1	1/1	2/2	2/2
OUTPUT (AC)				
Rated AC active power	2000W	3000W	4000W	5000W
Max. AC active Power (Pf=1)	2100W	3150W	4200W	5250W
Rated output voltage	1-Ph, 220/230/240Vac			
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)			
Gird frequency range	50/60Hz(±4.5Hz), (adjustable)			
Max. AC output current	9.5A	14.3A	19A	23.6A
PROTECTION DEVICES				
Input DC switch, Anti-islanding protection, AC overcurrent & short circuit, DC reverse connection, Anti-surge protection, Insulation resistance detection, Leakage current protection, Intelligent reactive power regulator & PID				
SYSTEM FEATURES				
Topology	Transformer less			
Max/Euro/MPPT efficiency	>98.8% / >98.4% / >99%			
Front Panel	LED/LCD Display			
Cooling	Natural Cooling			
Communication interface	RS485, WIFI, GPRS(optional)			
Warranty	5years(optional 10/15/20years)			
ENVIRONMENTAL				
Operating temperature	-25.0 to 60.0 °C & 0~99% (RH)			
Protection rating	IP65			
PHYSICAL				
Dimension W×L×D (mm)	285mm×336mm×125mm		335mm×426×125mm	
Net Weight (kg)	8.8kgs		12.85Kgs	

OG SERIES

3-Ph 380/400/415V AC, 50/60Hz, Grid Tie string inverters from 6KW to 15KW

HIGH PERFORMANCE STRING INVERTERS WITH BEAUTIFUL MOLDED CASE ENCLOSURE

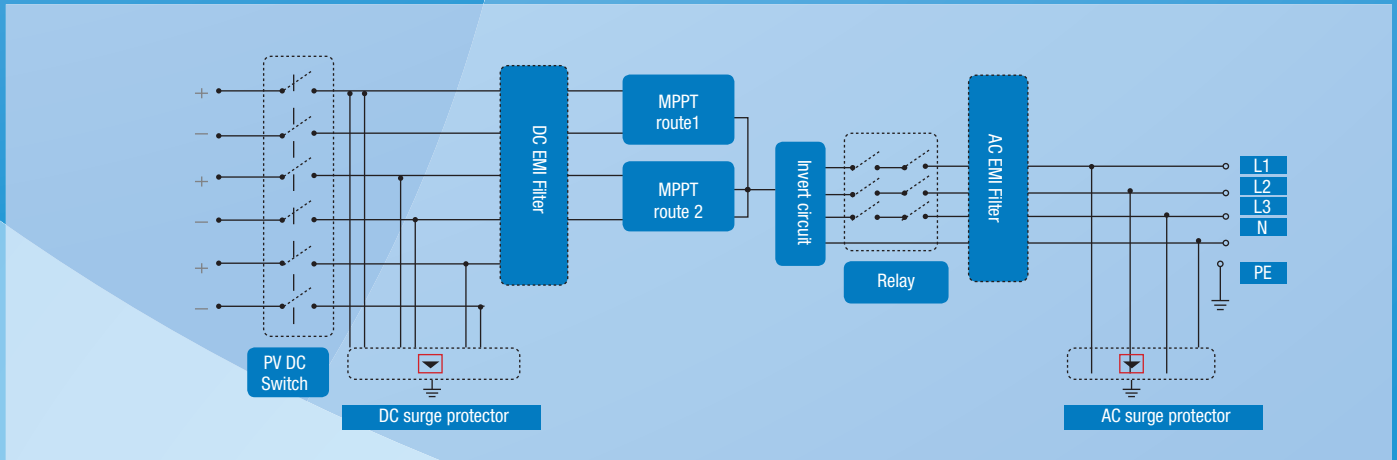
- From 6KW to 15KW
- Wide PV input voltage range
- Rapid Double MPPT tracking technology
- Superior PV energy harvest
- Transformers less design with higher operation efficiency
- Excellent natural thermal design
- High over load capability under most ambient conditions up to 60deg C
- Product design life of 25 years
- 5/10/15/20years of warranty

FULL DATA DISPLAY AND COMMUNICATIONS

- Customized LCD display
- System status at a glance with Bright LED indicator
- Web/iOS/Android based power monitoring software
- Big-Data analysis based power plant monitoring system
- High speed RS-485 & Wifi communications port
- Optional 4G based GPRS module
- Remote monitoring and firmware upgrades

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC

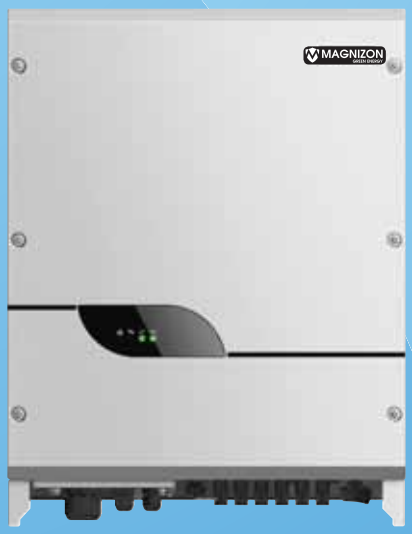


SPECIFICATIONS

MODEL	OG-6K-DM	OG-8K-DM	OG-10K-DM	OG-12K-DM	OG-15K-DM
INPUT (DC)					
Max. DC input power	7200W	9600W	12000W	14400W	18000W
Max.DC input voltage	1000Vdc				
Max. Input Current	22A (2x11A)	22A (2x11A)	33A (3x11A)	33A (3x11A)	33A (3x11A)
MPPT tracking voltage range	160~950Vdc				
MPPT operating voltage range (full load)	300-850V	380-850V	470-850V	380-850V	470-850V
Number of MPPT tracking	2	2	2	2	2
Maximum number of PV strings	2(1/1)	2(1/1)	3(2/1)	3(2/1)	3(2/1)
OUTPUT (AC)					
Rated AC active power	6KW	8KW	10KW	12KW	15KW
Max. AC active Power (Pf=1)	6.6KW	8.8KW	11KW	13.2KW	16.5KW
Rated output voltage	3Ph+N+PE , 380/400/415Vac, 50/60Hz(±4.5Hz), (adjustable)				
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)				
Max. AC output current	10A	13A	16A	19A	23A
PROTECTION DEVICES					
Input DC switch, Anti-islanding protection, AC overcurrent & short circuit, DC reverse connection, Anti-surge protection, Insulation resistance detection, Leakage current protection, Intelligent reactive power regulator & PID					
SYSTEM FEATURES					
Topology	Transformer less				
Max/Euro/MPPT efficiency	>98.8% / >98.4% / >99%				
Front Panel	LED/LCD Display				
Communication interface	RS485, USB, Ethernet, WIFI(optional), GPRS(optional)				
Warranty	5years(optional 10/15/20years)				
ENVIRONMENTAL					
Operating temperature	-25.0 to 60.0 °C & 0~99% (RH non-condensing)				
Protection rating	IP65				
PHYSICAL					
Dimension W×L×D (mm)	385mm×490mm×190mm				
Net Weight (kg)	19.8Kgs		21.8Kgs		

OG SERIES

3-Ph 380/400/415V, 50/60Hz AC , Grid Tie string inverters from 20KW to 30KW



HIGH PERFORMANCE GRID TIE INVERTERS

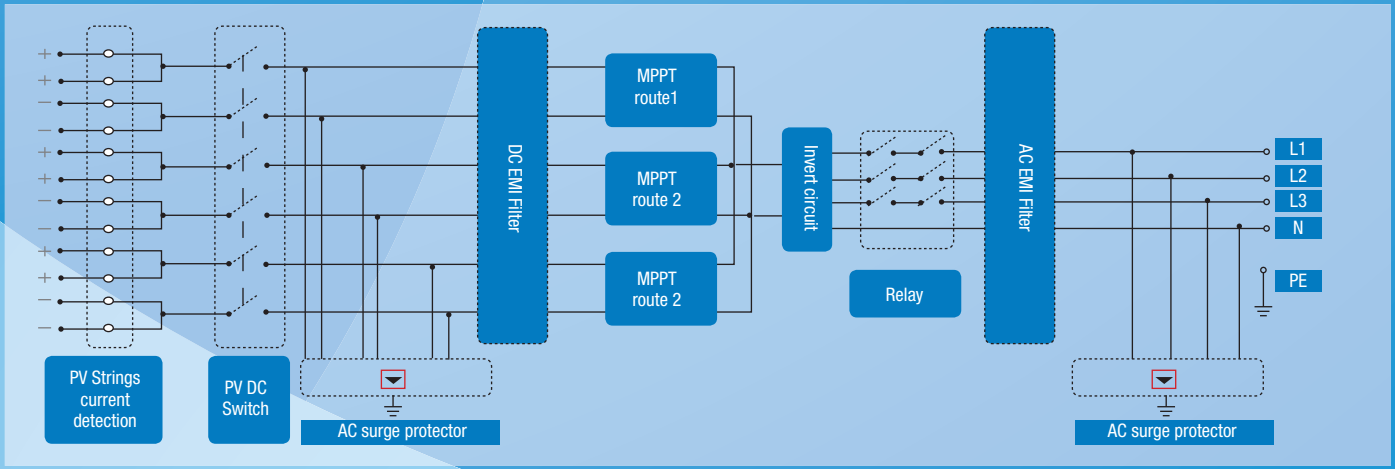
- From 20KW to 30KW
- Wide PV input voltage range
- Rapid triple MPPT tracking technology
- Superior PV energy harvest
- Transformers less design with higher operation efficiency
- Excellent natural thermal design
- High over load capability under most ambient conditions up to 60deg C
- Product design life of 25 years
- 5/10/15/20years of warranty

FULL DATA DISPLAY AND COMMUNICATIONS

- Customized LCD display
- System status at a glance with Bright LED indicator
- Web/iOS/Android based power monitoring software
- Big-Data analysis based power plant monitoring system
- High speed RS-485 & Wifi communications port
- Optional 4G based GPRS module
- Remote monitoring and firmware upgrades

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC



SPECIFICATIONS

MODEL	OG-20K-TM	OG-30K-TM
INPUT (DC)		
Max. DC input power	24000W	36000W
Max.DC input voltage	1000Vdc	
Max. Input Current	46A (2x23A)	69A (3x23A)
MPPT tracking voltage range	200~950Vdc	
Number of MPPT tracking	3	3
Maximum number of PV strings	5(2/2/1)	6(2/2/2)
OUTPUT (AC)		
Rated AC active power	20KW	30KW
Max. AC active Power (Pf=1)	22KW	32KW
Rated output voltage	3Ph+N+PE , 380/400/415Vac	
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)	
Gird frequency range	50/60Hz(±4.5Hz), (adjustable)	
Max. AC output current	30A	48A
PROTECTION DEVICES		
Input DC switch, Anti-islanding protection, AC overcurrent & short circuit, DC reverse connection, Anti-surge protection, Insulation resistance detection, Leakage current protection, Intelligent reactive power regulator & PID		
SYSTEM FEATURES		
Topology	Transformer less	
Max/Euro/MPPT efficiency	>98.8% / >98.4% / >99%	
Front Panel	LED/LCD Display	
Cooling	Natural Cooling	
Communication interface	RS485, WIFI, GPRS(optional)	
Warranty	5years(optional 10/15/20years)	
ENVIRONMENTAL		
Operating temperature	-25.0 to 60.0 °C & 0~99% (RH non-condensing)	
Protection rating	IP65	
PHYSICAL		
Dimension W×L×D (mm)	550mm×715mm×284mm	
Net Weight (kg)	53Kgs	

OG SERIES

3-Ph 380/400/415V, 50/60Hz AC , Grid Tie string inverters from 50KW to 90KW

HIGH PERFORMANCE GRID TIE INVERTERS

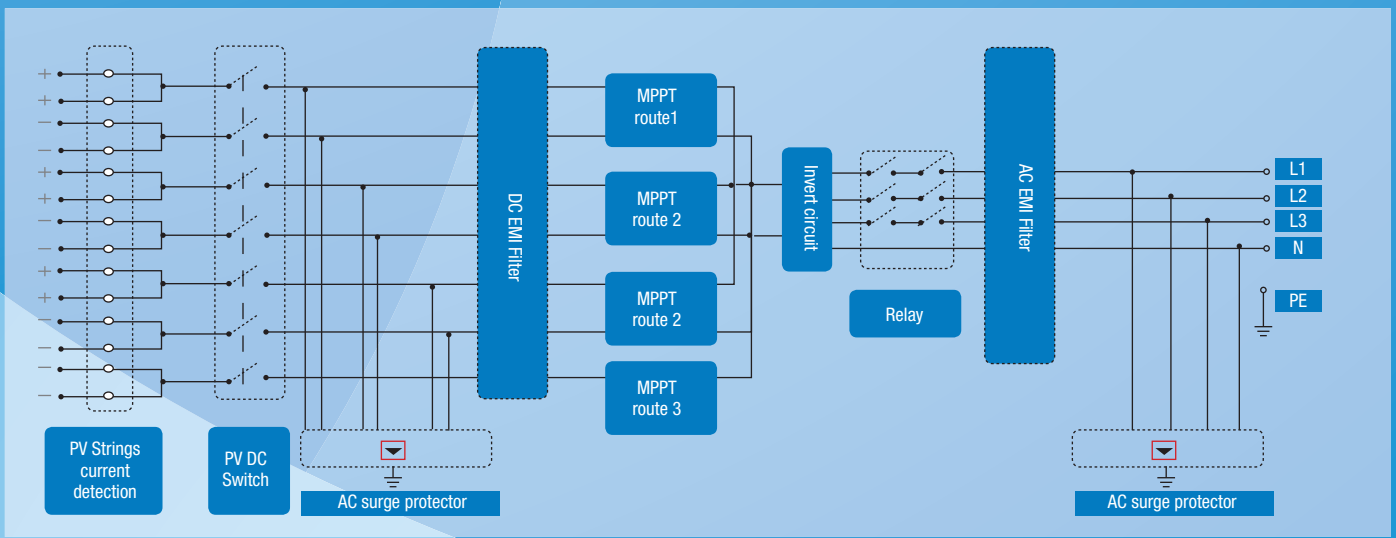
- Capacity 50KW/60KW/80KW/90KW
- Wide PV input voltage range
- Rapid Four MPPT tracking technology
- Superior PV energy harvest
- Transformers less design with higher operation efficiency
- Excellent natural thermal design
- High over load capability under most ambient conditions up to 60deg C
- Product design life of 25 years
- 5/10/15/20years of warranty

FULL DATA DISPLAY AND COMMUNICATIONS

- Customized LCD display
- System status at a glance with Bright LED indicator
- Web/iOS/Android based power monitoring software
- Big-Data analysis based power plant monitoring system
- High speed RS-485 & Wifi communications port
- Optional 4G based GPRS module
- Remote monitoring and firmware upgrades

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC



SPECIFICATIONS

MODEL	OG-50K-FM	OG-60K-FM	OG-80K-FM	OG-90K-FM
INPUT (DC)				
Max. DC input power	60000W	72000W	96000W	108000W
Max.DC input voltage	1100Vdc			
Max. Input Current	116A (25/25/33/33)	132A (33/33/33/33)	146A (40/40/33/33)	160A (40/40/33/33)
MPPT tracking voltage range	200~950Vdc			
Number of MPPT tracking	4	4	4	4
Maximum number of PV strings	12(3/3/3/3)	12(3/3/3/3)	14 (4/4/3/3)	15 (4/4/3/3)
OUTPUT (AC)				
Rated AC active power	50KW	60KW	80KW	90KW
Max. AC active Power (Pf=1)	55KW	66KW	88KW	99KW
Rated output voltage	3Ph+N+PE , 380/400/415Vac			
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)			
Gird frequency range	50/60Hz(±4.5Hz), (adjustable)			
Max. AC output current	83A	92A	134A	150A
PROTECTION DEVICES				
Input DC switch, Anti-islanding protection, AC overcurrent & short circuit, DC reverse connection, Anti-surge protection, Insulation resistance detection, Leakage current protection, Intelligent reactive power regulator & PID				
SYSTEM FEATURES				
Topology	Transformer less			
Max/Euro/MPPT efficiency	>98.8% / >98.4% / >99%			
Front Panel	LED/LCD Display			
Cooling	Natural Cooling			
Communication interface	RS485, WIFI, GPRS(optional)			
Warranty	5years(optional 10/15/20years)			
ENVIRONMENTAL				
Operating temperature	-25.0 to 60.0 °C & 0~99% (RH-non-condensing)			
Protection rating	IP65			
PHYSICAL				
Dimension W×L×D (mm)	550mm×715mm×284mm		855mm×555mm×275mm	
Net Weight (kg)	53Kgs	55Kgs	67Kgs	71kgs

OG-MC SERIES

3-ph 380/400/415V 50/60Hz AC, On Grid PV inverter systems from 100KW to 750KW

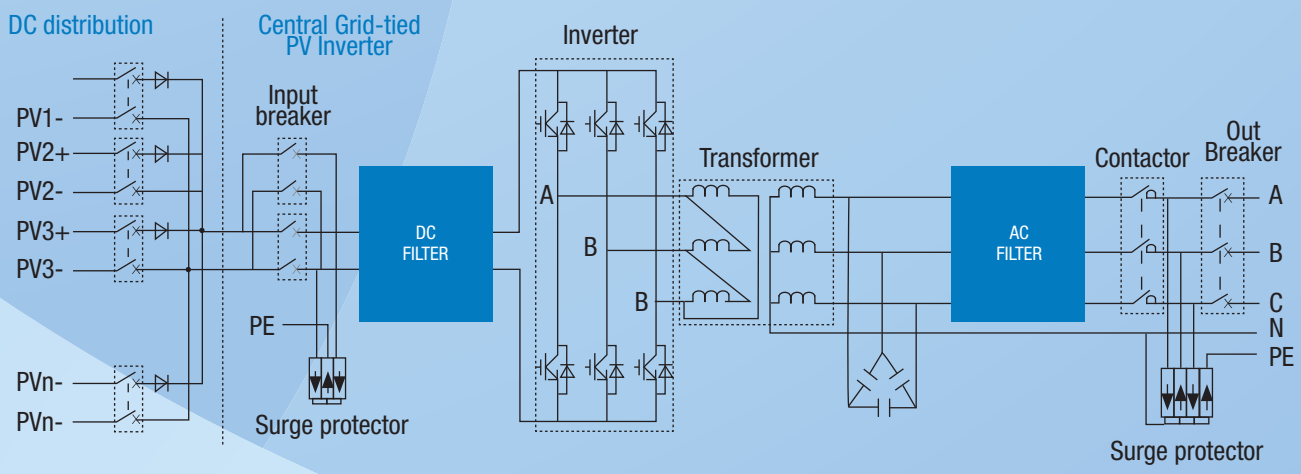
KEY FEATURES:

- More than 25 years of life span
- Transformer-less design and compact in size
- System with strong compatibility, easy to extend
- Good cooling system and safety design
- MPPT efficiency > 99.9%
- Maximum efficiency > 98.7%
- Euro. efficiency > 98.5%
- Standby(night time) losses<10W
- Redundancy control circuits designed-in and over-size metalized film capacitors are used to guarantee its safe operation and system reliability
- Reactive power adjustable
- Unique Zero Voltage Ride Through (ZVRT) function, anti-islanding and output abnormal voltage protection secures its safe
- Advanced DSP Control makes data more accurate
- Active power adjustable continuous full range (0~100%)
- Support a variety of communication interfaces
- Perfect protection functions

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC

OG-MC SERIES AND OG-MX SERIES



SPECIFICATIONS

MODEL	OG100K-MC	OG250K-MC	OG500K-MC	OG750K-MC
		INPUT		
Max. DC input power	110KW	275KW	550KW	825KW
Max. DC input voltage	1000Vdc			
MPPT tracking voltage range	450~850Vdc			
DC Input terminals	4	4	8	10
Max. input current	240A	600A	1200A	1500A
		OUTPUT		
Rated output power	100KW	250KW	500KW	750KW
Rated output voltage	3Ph+N+PE , 400Vac			
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)			
Gird frequency range	50/60Hz(±4.5Hz), (adjustable)			
Rated AC output current	144A	361A	722A	1237
Max. AC output current	158A	397A	794A	1360
		SYSTEM FEATURES		
Max. efficiency	>97.7%	>97.9%	>98.1%	>98.1%
Euro efficiency	>97.4%	>97.6%	>97.9%	>97.9%
MPPT efficiency	>99%			
Standby(night time) losses	<10W			
Cooling	Forced air cooling			
Communication interface	RS485, external Ethernet (optional)			
		ENVIRONMENTAL		
Operating temperature	-40.0 to 55.0 °C & 0~95% (RH: non-condensing)			
Protection rating	IP20/ IP42(optional)			
		PHYSICAL		
Dimension W×H×D (mm)	835×935×1850	1200×935×2200	1600×935×2200	1600×935×2200
Net Weight (kg)	900	1470	1550	1600

OG-MX SERIES

3-ph 380/400/415Vm 50/60Hz AC, On Grid PV inverter systems from 500KW to 1.26MW

INTENSIVE TURNKEY SOLUTION

- 7ft shipping container for 1MW, only 5m²
- Integrate two high power density inverters
- Integrate lighting, cooling, security, fire-fighting
- Integrate DC power distribution in inverters
- Easy transportation and deploy

EXCELLENT DESIGN

- Special sand, dust, water proof design, IP54
- Strong ventilation ensure best cooling
- Inverters front- easy maintenance design
- Washable filter, low wind resistance outlet
- Safety with access door and emergency exit

STRONG ROBUST

- Integrate 50mm rock-wool heat-insulating layer
- Standard shipping COR-TENA steel container
- Good mechanical strength and anti-corrosion
- External with high-end 3 layer protective coating
- 25 years lifetime design

OTHER FEATURES

- System with strong compatibility, easy to extend
- Good cooling system and safety design
- Redundancy control circuits designed-in and over-size metalized film capacitors are used to guarantee its safe operation and system reliability
- Reactive power adjustable
- Unique Zero Voltage Ride Through (ZVRT) function, anti-islanding and output abnormal voltage protection secures its safe
- Advanced DSP Control makes data more accurate
- Active power adjustable continuous full range (0~100%)
- Support a variety of communication interfaces
- Perfect protection functions

COMPLIANCE STANDARDS:

- IEC61727, IEC62116,
- IEC 62109-1, IEC62109-2, IEC 61000-3-2, IEC 61000-6-2, IEC-61000-6-3
- VDE 0126-1-1, VDE-AR-N4105, EN50178,VDE0126-1-1, ENEL-Guide, G59, G83, RD1663AS4777, AS/NZS 3100 & CGC

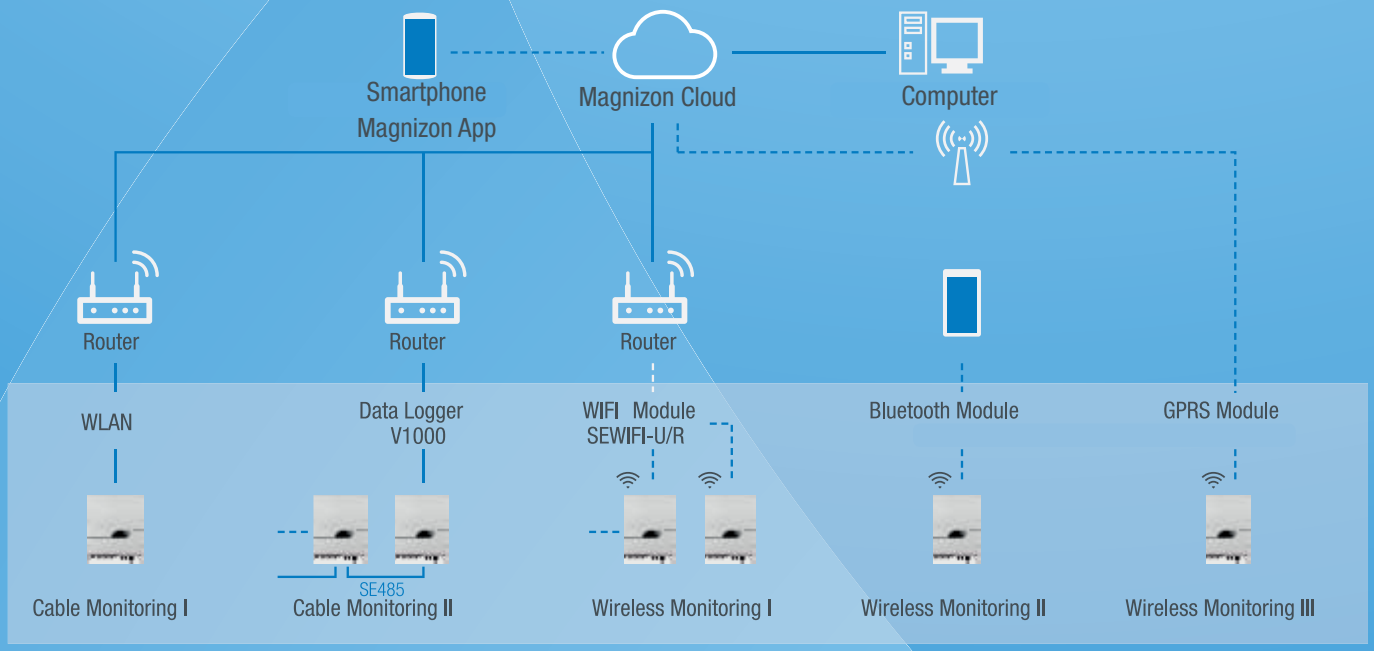
SPECIFICATIONS

MODEL	OG500K-MX	OG630K-MX	OG1000K-MX	OG1260-MX
		INPUT		
Max. DC input power	550KW	690KW	1100KW	1386KW
Max. DC input voltage	900Vdc	900Vdc	900Vdc	1000Vdc
MPPT tracking voltage range	450~850Vdc (Rated voltage 576Vdc)			
Number of MPPT tracking	1			
Number of DC input tracking	8	10	16	20
Max. input current	1200A	1440A	2400A	2880A
		OUTPUT		
Rated output power	500KW	630KW	1000KW	1260KW
Rated output voltage	400Vac	400Vac	315/400Vac	315/400Vac
AC output topology	3Ph+N+PE	3Ph+N+PE	3Ph+PE	3Ph+PE
Output voltage range	(1±15%) x Normal AC Voltage (adjustable ±5%,±10%,±15%,±20%)			
Gird frequency range	50/60Hz(±4.5Hz), (adjustable)			
Rated AC output current	722A	909A	2140/1836A	2310A
Max. AC output current	794A	1000A	2248/2014A	2424A
		SYSTEM FEATURES		
Max. efficiency	>97.50%	>97.50%	>98.5%	>98.5%
Euro efficiency	>97.10%	>97.10%	>98.1%	>98.1%
MPPT efficiency	>99%			
Standby(night time) losses	<220W			
Cooling	Forced air cooling			
Communication interface	RS485, external Ethernet (optional)			
		ENVIRONMENTAL		
Operating temperature	-40.0 to 55.0 °C & 0~95% (RH: non-condensing)			
Protection rating	IP54			
		PHYSICAL		
Dimension W×H×D (mm)	3150×1850×1900	3150×1850×1900	6058×2896×2438	6058×2896×2438
Net Weight (kg)	5000	5200	7000	7200

PV INTELLIGENT CLOUD-BASED MONITORING SYSTEM

Intelligent Cloud Control, Control of Your World Anytime and Anywhere

Centered on Cloud server MagnizonCloud, PV Intelligent Cloud Monitoring System provides five cable or wireless access methods (WLAN/RS485/WIFI/Bluetooth/GRPS) as well as two Clients - smartphone APP (Magnizon) and PC internet browser, best suited for residential PV power station, business and industrial rooftop power station, farm and fish farm solar sharing PV power station and large ground-mounted power station system, et c. Depending on PV system monitoring requirements, it has various intelligent networking methods, allowing customers to monitor the operation of PV power station system anytime and anywhere.



Magnizon App

Easy to install

Available on Android/IOS

Big data visualization and analysis

FLEXIBLE AND DIVERSIFIED COMMUNICATION ACCESSORIES TO MEET THE NEEDS OF VARIOUS TYPES OF APPLICATIONS

V1000: Preferred monitoring solution for commercial rooftop/ industry factory distributed PV power station SEWIFI-R/U: Preferred monitoring solution for residential rooftop distributed PV power station SEGPRS-R/U: Preferred monitoring solution for village-level"Aid-the-Poor"program

DATA LOGGER V1000

- Built-in Web Server, supporting LAN monitoring
- 12 Months data storage
- Automatic network-clock synchronization
- RS485 Interface for the Connection of Inverters
- Standard RJ45 Path Cable

Model	V1000
INPUT	
Nominal Voltage	5V
Max. Current	1A
GENERAL	
Operating Temperature	-20~500C
Ingress Protection	IP20
Protection	Class II
Humidity	0~95%
HMI & COM	
LED	Green/Red/Orange
RS485-1	Default, Half-Duplex
RS485-2	Optional, Half-Duplex
Data Output	Ethernet (RJ45)
Data Logging	12 months
Web Browser	Manage key parame ters and monitor power generation data
Clock Sync	Automatically sync with time server
MECHANICAL	
Dimension (W*H*D)	118mm*78mm*29mm
Weight	0.25kg
CERTIFICATION	
Safety	CE/LVD

WIFI COMMUNICATION MODULE SEWIFI-R/U

- Plug and play, quick and convenient
- Preferred monitoring solution for residential use

Model	SEWIFI-R	SEWIFI-U
Connection	TTL serial	USB
Standard	802.11 b/g/n	
Distances	100m	
Setting	APP/WEB	
INPUT		
Input Voltage	DC 5V	
Static Power Consumption	<1.6W	
GENERAL		
Operating temperature	-25°C~60°C	
Humidity	10%~90%	
Protection	IP65	IP20
Dimension (L*W*H)	71.4mm*71mm*38mm/ 59.5mm*21.98mm*9.18mm	
CERTIFICATION		
Safety	FCC, CE, ROHS	

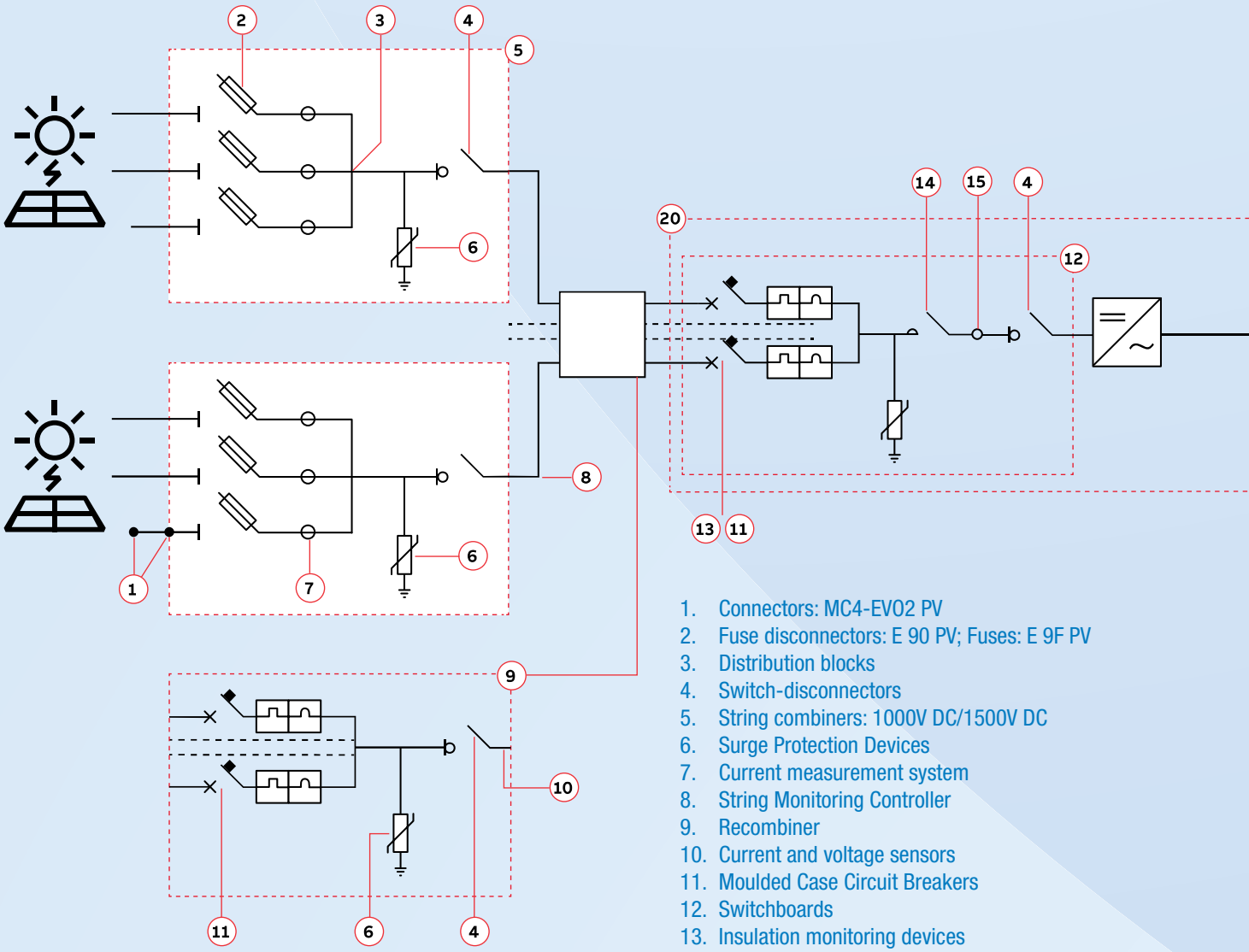
GPRS COMMUNICATION MODULE MAG-GPRS-R/U

- Mobile internet monitoring, best suited for rural and remote areas
- Preferred monitoring solution for PV poverty alleviation project
- Protection rang of IP65

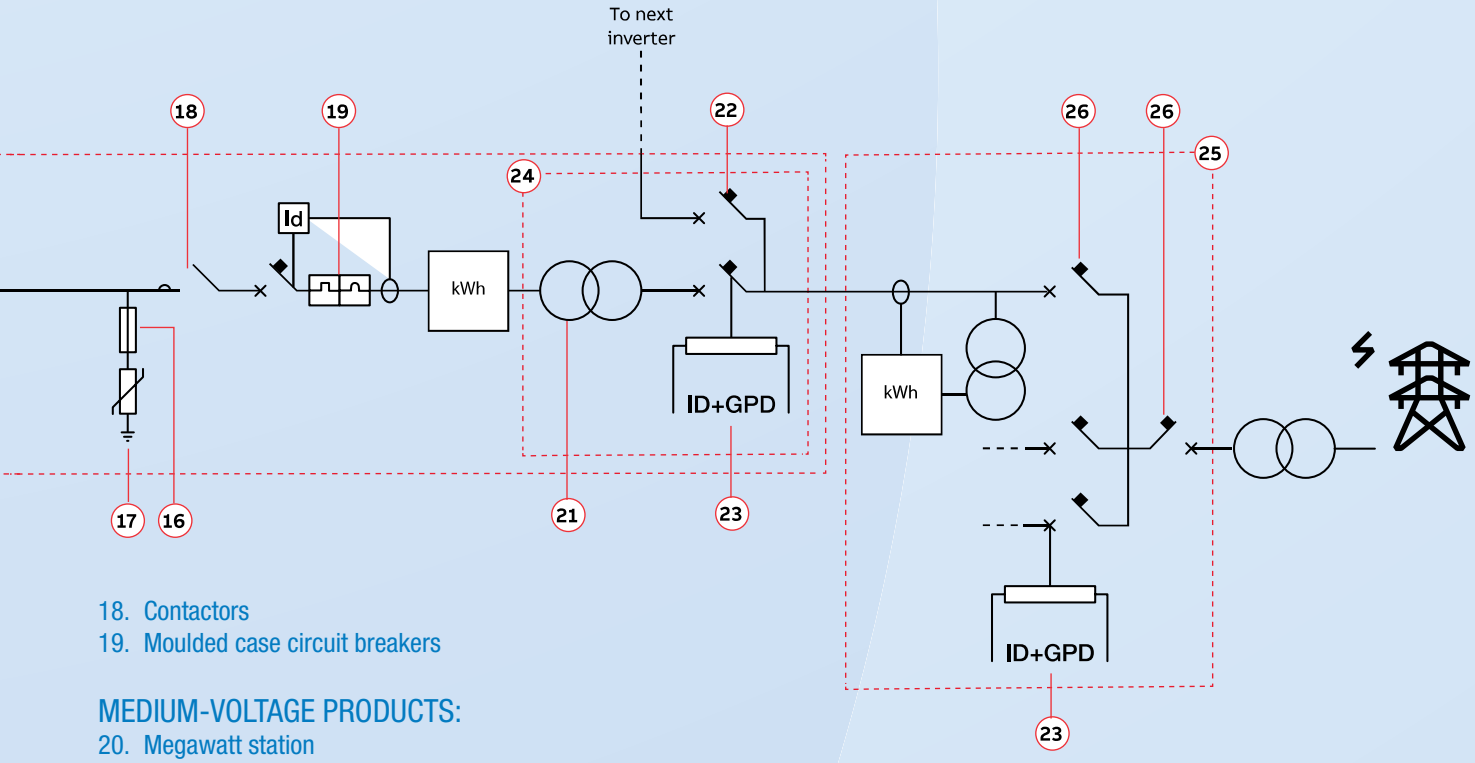
Model	MAG-GPRS-R	MAG-PRS-U
Connection	TTL serial	USB
Standard	GSM/GPRS	
Distances	-----	
Setting	Plug and Play	
INPUT		
Input Voltage	DC 5V	
Static Power Consumption	<2W	
GENERAL		
Operating temperature	-25°C~60°C	
Humidity	10%~90%	
Protection	IP65	
Dimension (L*W*H)	71.4mm*71mm*38mm/ 120mm*80mm*32.7mm	
CERTIFICATION		
Safety	FCC, CE, ROHS	

EXAMPLES OF PHOTOVOLTAIC APPLICATIONS

Sistemi utility scale> 1000 kW MT/AT



1. Connectors: MC4-EVO2 PV
2. Fuse disconnectors: E 90 PV; Fuses: E 9F PV
3. Distribution blocks
4. Switch-disconnectors
5. String combiners: 1000V DC/1500V DC
6. Surge Protection Devices
7. Current measurement system
8. String Monitoring Controller
9. Recombiner
10. Current and voltage sensors
11. Moulded Case Circuit Breakers
12. Switchboards
13. Insulation monitoring devices
14. Contactors
15. GFDI Application
16. Fuse disconnectors
17. Surge protection devices



18. Contactors
19. Moulded case circuit breakers

MEDIUM-VOLTAGE PRODUCTS:

20. Megawatt station
21. Transformers: Dry-type transformers, oil-immersed transformers
22. Gas-insulated secondary switchgear: SafeRing / Safeplus
    Air-insulated secondary switchgear: UniSec
    Air-insulated switch-disconnector: NALF
    Recloser: Gridshield
    Circuit breaker: VD4
23. Interface protection system: ABB Relion»› Family, REG615
24. Modular Systems: Compact Secondary Substation, Secondary Skid Unit, Secondary Enclosed Unit
25. eHouse, skid-mounted substation
26. Gas-insulated switchgear: ZX product family
    Air-insulated primary switchgear: UniGear product family, UniGear Digital
    Air-insulated secondary switchgear: UniSec
    Outdoor breakers: R-MAG"' (dead tank), OVB-VBF (life tank)
    Recloser: Gridshield

PHOTOVOLTAIC SOLUTION
PV COMBINER BOX

Due to their small size, system protection is often overlooked within residential PV installations. On the contrary adequate protection of the DC and AC circuits in residential installations is just as critical as in much larger systems. Typically made of one or two strings of eight modules, high voltage DC cables may be run throughout the residential building; here it is critical to protect people and property from re and death in the event of accidental damage or system failure.

1 STRING INPUT 1 STRING OUTPUT

Type	PVX-1/1
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	300x250x125mm
DC Fuse	10*38mm 1000V DC 15A (Changeable)
DC Switch	32A Max ,600V DC ~1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

2 STRING INPUT 1 STRING OUTPUT

Type	PVX-2/1
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	300x250x125mm
DC Fuse	10*38mm 1000V DC 15A (Changeable)
DC Switch	32A Max ,600V DC ~1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

2 STRING INPUT 2 STRING OUTPUT

Type	PVX-2/2
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	350x250x180 mm
DC Fuse	10*38mm 1000V DC 15A (Changeable)
DC Switch	32A Max ,600V DC ~1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

3 STRING INPUT 1 STRING OUTPUT

Type	PVX-3/1
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	350X250X180mm
DC Fuse	10*38mm 1000V DC 15A (Changeable)
DC Switch	32A Max ,600V DC ~1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

4 STRING INPUT 1 STRING OUTPUT

Type	PVX-4/1
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	340X240X160mm
DC Fuse	10*38mm 1000V DC 15A (Changeable)
DC Switch	63A Max ,1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

4 STRING INPUT 2 STRING OUTPUT

Type	PVX-4/2
IP Protection	IP65
Enclosure Material	100% Poly-carbonate, Anti-UV protection
Enclosure Size	400X300X150mm
DC Fuse 10*38mm	1000V DC 15A (Changeable)
DC Switch	32A Max ,1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

6 STRING INPUT 1 STRING OUTPUT

Type	PVX-6/1
IP Protection	IP65
Enclosure Material	100% Poly-carbonate ,Anti-UV protection
Enclosure Size	500X400X210mm
DC Fuse	10*38mm 1000V DC 15A(Changeable)
DC Switch	120A Max ,1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

6 STRING INPUT 2 STRING OUTPUT

Type	PVX-6/2
IP Protection	IP65
Enclosure Material	100% Poly-carbonate ,Anti-UV protection
Enclosure Size	300x400x150 mm;
DC Fuse	10*38mm 1000V DC 15A(Changeable)
DC Switch	32A Max ,1000V DC
DC DPS	1000V DC 20/40KA Type II
Installation	Out-Door or In-Door

16 STRING INPUT 1 STRING OUTPUT

Type	PVX-16/1R
IP Protection	IP65
Enclosure Material	Steel with Powder Coated
Enclosure Size	850x650x210mm
Voltage	1000V DC Max
DC Fuse	10*38mm 1000V DC 15A(Changeable)
DC Switch	250A Max ,1000V DC
DC DPS	1000V DC 20/40KA Type II
Protocol	RS485/MODBUS-RTU
Monitoring Device	Monitoring DC voltage and Current of sub-array
Power Supply	Self-Supplied DC24V
Installation	Out-Door or In-Door

APPLICATIONS

ON-GRID SYSTEM SETUP

On-Grid Systems are solar PV systems that only generate power when the utility power grid is available, of course adequate sun shine must be available at site. Plant must connect to the grid to function.

COMMERCIAL APPLICATIONS

Range starts from 10MW and goes up to 500MW and above. Power plant works parallel to utility and cater the peak load demands during day time. Magnizon is well equipped with strong financial support to handle utility grade solar power plants through PPA/BOT/PPP contracts. Scope includes, Solar power plant and accessories, high capacity power transformers , switchyards and HT and OHT transmission and control system.

INDUSTRIAL APPLICATIONS

Plant range varies from 10KW to 10MW. Most cases with 3-ph, 380/400/415V AC system. Specific application may also uses MV system . PV plant works during sun shine days and reduces the energy dependency on utility by 70-80%. PV plant can send excess power generated back to the grid when you are overproducing so you credit it for later use or get paid by the utility companies depends on national grid regulations. Ware houses and production plants are very much suitable entities for the PV plant setup.

RESIDENTIAL APPLICATIONS

Range starts from 1KW to 20KW , both 1-Ph and 3-Ph 380/400/415V environment. Independent house, villas and community house etc are perfect fit for residential PV plants. Most of the house will have limitations on space available to install PV plants. Smaller plant- smaller investment and free power for 25 - 30years.

MAGNIZON
GREEN ENERGY

info@magnizon.com www.magnizon.com

Authorised Distributor

We conceptualize a unique way simplifying and customizing the products, at the same time ensuring best possible and optmized techno-commercial solutions to our customers.

Specificatios are subject to change without notice. Photos may change slightly from final products.

magnizon magnizon1 +971 56 63 58098 @magnizon1 magnizon

Model # HSP8048SW-LCD

Magnizon Smart HSP series inverter/charger with duel operational modes with built in Advanced MPPT solar charge controller minimizes the hassles of Solar installation especially in hybrid environments. Large LCD display with functional keys to select various parameters and displays real time information, selecting the modes of operation, Battery charger current settings etc along with operational schemes. Day time will be supported through solar panels and night time or rainy days will be with batteries and Utility power with intelligent microprocessor based automatic switching. Reliable Smart Micro controller technology with advanced IGBT design and frequency controlled power, very much compatible to all varieties of loads: resistive/inductive loads such as refrigerators, motors, pumps, compressors and laser printers as well as electronic loads like TV's, Computers, power tool and battery chargers. Smart micro controller based 3-stage built in charging system properly charge and maintain battery bank in the obscene of solar power or rainy days. The charge rate is selectable so you can use a variety of battery sizes and types to fit your back up time requirements.

.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Health care/Banking/Commercial applications
- Telecom applications

Model # HSP8048SW-LCD

Key features:

- Micro controller based Smart hybrid technology
- Pure sine wave output
- Dual Chargers (Built-in MPPT Solar controller and AC mode battery Charger)
- **Parallel Mode:** Upto 6nos (1-PH) and Upto 9nos (3-PH)
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.

Operational Modes:

- **PV-Grid-Battery:** Magnizon HSP series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # HSP8048SW-LCD

Specifications:

Model	HSP8048SW-LCD
Rated Power	8KVA/8KW
INPUT AC	
Nominal Input Voltage	220/230/240V AC
Low Loss Voltage	170V AC +/- 7V (UPS mode)
	90V AC +/- 7V (Appliances mode)
Low loss return Voltage	180V AC +/- 7V (UPS mode)
	100V AC +/- 7V (Appliances mode)
High loss Voltage	280VAC +/- 7V
High loss Return Voltage	270VAC +/- 7V
Max AC input voltage	300V AC
Frequency Range	50Hz/60Hz (auto sensing)
Low loss frequency	40+/-1Hz
Low loss return frequency	42+/-1Hz
Hig loss frequency	65+/-1Hz
High loss return frequency	63+/-1Hz
Output Short circuit Protection	Line Mode: Circuit Breaker
	Battery Mode: Electronic Circuits
Efficiency	>97%
OUTPUT AC	
AC Voltage Regulation	220/230/240V AC +/- 5%
Rated Output Power	8KVA/8KW
Output Voltage Waveform	Pure Sine wave
Output Frequency	50Hz/60Hz (auto sensing)
Surge Power	24000VA
Efficiency	95-97%
Over Load protection	5sec @>150% load; 10sec@110~150% load
Nominal DC input Voltage	48V DC
Cold Start Voltage	46.0V DC
Low DC Warning Voltage	
@load < 20%	44.0V DC
@ 20% < load < 50%	42.8V DC
@ load > 50%	40.4V DC
Low DC Warning Return Voltage	
@load < 20%	46.0V DC
@ 20% < load < 50%	44.8V DC
@ load > 50%	42.4V DC
Low DC Cut-off Voltage	
@load < 20%	42.0V DC
@ 20% < load < 50%	40.8V DC
@ load > 50%	38.4V DC
High DC Recovery Voltage	58V DC
High DC Cut-off Voltage	62V DC
No Load Power Consumption	<5W
Saving Mode Power Consumption	<15W
Transfer Time	6-10mSec
Efficiency	93~ 97%
Charger Mode Specs	

Model # HSP8048SW-LCD

Battery Voltage	48V DC
Floating Charge Voltage	54V DC
Overcharge Protection	60V DC
Maximum Charge Current	120A
Bulk Charging Voltage (Flooded Battery)	58.4V DC
Bulk Charging Voltage (AGM/GEL battery)	56.4V DC
Charging Algorithm	3-Stage (CC-CV-Floating)
Solar Charging Mode Specs	
Maximum PV Array Power	2nos of 5000Wp (10,000Wp)
MPPT Range @ Operating Voltage	120V DC to 450V DC
Maximum PV Array Open Circuit Voltage	500V DC
Maximum Charging Current	160A
Maximum Efficiency	98%
Battery Voltage Accuracy	+/- 0.3%
PV Voltage Accuracy	+/- 2V
Standby Power Consumption	2Watts
Charging Algorithm	3-Stage (CC-CV-Floating)
General Specs	
Dimension (DxWxH-mm)	420x562x155
Net Weight (kgs)	21Kgs
Humidity	5% to 95% Relative Humidity (non-condensing)
Operating Temperature	0degC to 55deg C
Storage Temperature	-15degC to 60degC
Parallel Compatibility	Upto 6nos
Communication	RS232 Cable along with monitoring software included
Dry contact for remote management	Yes. Ability to monitor Power OFF/On, LOW DC, Battery voltage, charge status etc
Quality Standards	
Disturbance at Mains Terminals	EN61000-6-3:2007+ A1: 2011+ AC:2012
Radiated Disturbance	EN61000-6-3:2007+ A1: 2011+ AC:2012
Harmonic Current Emission	EN61000-3-12: 2011
Voltage fluctuations & flickering	EN61000-3-11: 2000
Electrostatic Discharge (ESD)	IEC 6100-4-2:2008
Radio-frequency & continuous radiated disturbances	IEC 6100-4-3:2006 + A1:2007 + A2:2010
EFT/B Immunity	IEC 6100-4-4:2012
Surge immunity	IEC 6100-4-5:2014
Conducted RF immunity	IEC 6100-4-6:2013
Power frequency magnetic field	IEC 6100-4-8:2009
Voltage DIP, >95% reduction	IEC 6100-4-11:2004
Voltage DIP, >30% reduction	IEC 6100-4-11:2004
Voltage Interruption	IEC 6100-4-11:2004
EU Low voltage directives (LVD)	EN62109-1: 2010, EN62109-2:2011
EU Electromagnetic compatibility(EMC)	EN62040-2:2006, EN6100-3-2:2014, EN6100-3-3:2013
Quality Certification	ISO9001:2015, ISO14001:2015, CE, RoHs

Model # HSP5048SW-LCD

Magnizon Smart HSP series inverter/charger with duel operational modes with built in Advanced MPPT solar charge controller minimizes the hassles of Solar installation especially in hybrid environments. Large LCD display with functional keys to select various parameters and displays real time information, selecting the modes of operation, Battery charger current settings etc along with operational schemes. Day time will be supported through solar panels and night time or rainy days will be with batteries and Utility power with intelligent microprocessor based automatic switching. Reliable Smart Micro controller technology with advanced IGBT design and frequency controlled power, very much compatible to all varieties of loads: resistive/inductive loads such as refrigerators, motors, pumps, compressors and laser printers as well as electronic loads like TV's, Computers, power tool and battery chargers. Smart micro controller based 3-stage built in charging system properly charge and maintain battery bank in the obscene of solar power or rainy days. The charge rate is selectable so you can use a variety of battery sizes and types to fit your back up time requirements.

.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Health care/Banking/Commercial applications
- Telecom applications

Model # HSP5048SW-LCD

Key features:

- Micro controller based Smart hybrid technology
- Pure sine wave output
- Dual Chargers (Built-in MPPT Solar controller and AC mode battery Charger)
- **Parallel Mode:** Upto 6nos (1-PH) and Upto 9nos (3-PH)
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.

Operational Modes:

- **PV-Grid-Battery:** Magnizon HSP series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # HSP5048SW-LCD

Specifications:

Model	HSP5048SW-LCD
Rated Power	5KVA/5KW
INPUT AC	
Nominal Input Voltage	220/230/240V AC
Low Loss Voltage	170V AC +/- 7V (UPS mode)
	90V AC +/- 7V (Appliances mode)
Low loss return Voltage	180V AC +/- 7V (UPS mode)
	100V AC +/- 7V (Appliances mode)
High loss Voltage	280VAC +/- 7V
High loss Return Voltage	270VAC +/- 7V
Max AC input voltage	300V AC
Frequency Range	50Hz/60Hz (auto sensing)
Low loss frequency	40+/-1Hz
Low loss return frequency	42+/-1Hz
Hig loss frequency	65+/-1Hz
High loss return frequency	63+/-1Hz
Output Short circuit Protection	Line Mode: Circuit Breaker
	Battery Mode: Electronic Circuits
Efficiency	>97%
OUTPUT AC	
AC Voltage Regulation	220/230/240V AC +/- 5%
Rated Output Power	5KVA/5KW
Output Voltage Waveform	Pure Sine wave
Output Frequency	50Hz/60Hz (auto sensing)
Surge Power	15000VA
Efficiency	95-97%
Over Load protection	5sec @>150% load; 10sec@110~150% load
Nominal DC input Voltage	48V DC
Cold Start Voltage	46.0V DC
Low DC Warning Voltage	
@load < 20%	44.0V DC
@ 20% < load < 50%	42.8V DC
@ load > 50%	40.4V DC
Low DC Warning Return Voltage	
@load < 20%	46.0V DC
@ 20% < load < 50%	44.8V DC
@ load > 50%	42.4V DC
Low DC Cut-off Voltage	
@load < 20%	42.0V DC
@ 20% < load < 50%	40.8V DC
@ load > 50%	38.4V DC
High DC Recovery Voltage	58V DC
High DC Cut-off Voltage	62V DC
No Load Power Consumption	<5W
Saving Mode Power Consumption	<15W
Transfer Time	6-10mSec
Efficiency	93~ 97%
Charger Mode Specs	

Model # HSP5048SW-LCD

Battery Voltage	48V DC
Floating Charge Voltage	54V DC
Overcharge Protection	60V DC
Maximum Charge Current	80A
Bulk Charging Voltage (Flooded Battery)	58.4V DC
Bulk Charging Voltage (AGM/GEL battery)	56.4V DC
Charging Algorithm	3-Stage (CC-CV-Floating)
Solar Charging Mode Specs	
Maximum PV Array Power	5500W
MPPT Range @ Operating Voltage	120V DC to 450V DC
Maximum PV Array Open Circuit Voltage	500V DC
Maximum Charging Current	100A
Maximum Efficiency	98%
Battery Voltage Accuracy	+/- 0.3%
PV Voltage Accuracy	+/- 2V
Standby Power Consumption	2Watts
Charging Algorithm	3-Stage (CC-CV-Floating)
General Specs	
Dimension (DxWxH-mm)	100x300x410
Net Weight (kgs)	11.7Kgs
Humidity	5% to 95% Relative Humidity (non-condensing)
Operating Temperature	0degC to 55deg C
Storage Temperature	-15degC to 60degC
Parallel Compatibility	Upto 6nos
Communication	RS232 Cable along with monitoring software included
Dry contact for remote management	Yes. Ability to monitor Power OFF/On, LOW DC, Battery voltage, charge status etc
Quality Standards	
Disturbance at Mains Terminals	EN61000-6-3:2007+ A1: 2011+ AC:2012
Radiated Disturbance	EN61000-6-3:2007+ A1: 2011+ AC:2012
Harmonic Current Emission	EN61000-3-12: 2011
Voltage fluctuations & flickering	EN61000-3-11: 2000
Electrostatic Discharge (ESD)	IEC 6100-4-2:2008
Radio-frequency & continuous radiated disturbances	IEC 6100-4-3:2006 + A1:2007 + A2:2010
EFT/B Immunity	IEC 6100-4-4:2012
Surge immunity	IEC 6100-4-5:2014
Conducted RF immunity	IEC 6100-4-6:2013
Power frequency magnetic field	IEC 6100-4-8:2009
Voltage DIP, >95% reduction	IEC 6100-4-11:2004
Voltage DIP, >30% reduction	IEC 6100-4-11:2004
Voltage Interruption	IEC 6100-4-11:2004
EU Low voltage directives (LVD)	EN62109-1: 2010, EN62109-2:2011
EU Electromagnetic compatibility(EMC)	EN62040-2:2006, EN6100-3-2:2014, EN6100-3-3:2013
Quality Certification	ISO9001:2015, ISO14001:2015, CE, RoHs

Model # HSP3024SW-LCD

Magnizon Smart HSP series inverter/charger with duel operational modes with built in Advanced MPPT solar charge controller minimizes the hassles of Solar installation especially in hybrid environments. Large LCD display with functional keys to select various parameters and displays real time information, selecting the modes of operation, Battery charger current settings etc along with operational schemes. Day time will be supported through solar panels and night time or rainy days will be with batteries and Utility power with intelligent microprocessor based automatic switching. Reliable Smart Micro controller technology with advanced IGBT design and frequency controlled power, very much compatible to all varieties of loads: resistive/inductive loads such as refrigerators, motors, pumps, compressors and laser printers as well as electronic loads like TV's, Computers, power tool and battery chargers. Smart micro controller based 3-stage built in charging system properly charge and maintain battery bank in the obscene of solar power or rainy days. The charge rate is selectable so you can use a variety of battery sizes and types to fit your back up time requirements.

.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Health care/Banking/Commercial applications
- Telecom applications

Model # HSP3024SW-LCD

Key features:

- Micro controller based Smart hybrid technology
- Pure sine wave output
- Dual Chargers (Built-in MPPT Solar controller and AC mode battery Charger)
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.

Operational Modes:

- **PV-Grid-Battery:** Magnizon HSP series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # HSP3024SW-LCD

Specifications:

Model	HSP3024SW-LCD
Rated Power	3KVA/3KW
INPUT AC	
Nominal Input Voltage	220/230/240V AC
Low Loss Voltage	170V AC +/- 7V (UPS mode)
	90V AC +/- 7V (Appliances mode)
Low loss return Voltage	180V AC +/- 7V (UPS mode)
	100V AC +/- 7V (Appliances mode)
High loss Voltage	280VAC +/- 7V
High loss Return Voltage	270VAC +/- 7V
Max AC input voltage	300V AC
Frequency Range	50Hz/60Hz (auto sensing)
Low loss frequency	40+/-1Hz
Low loss return frequency	42+/-1Hz
High loss frequency	65+/-1Hz
High loss return frequency	63+/-1Hz
Output Short circuit Protection	Line Mode: Circuit Breaker
	Battery Mode: Electronic Circuits
Efficiency	>97%
OUTPUT AC	
AC Voltage Regulation	220/230/240V AC +/- 5%
Rated Output Power	3KVA/3KW
Output Voltage Waveform	Pure Sine wave
Output Frequency	50Hz/60Hz (auto sensing)
Surge Power	9000VA
Efficiency	95-97%
Over Load protection	5sec @>150% load; 10sec@110~150% load
Nominal DC input Voltage	24V DC
Cold Start Voltage	24.0V DC
Low DC Warning Voltage	
@load < 20%	22.0V DC
@ 20% < load < 50%	21.4V DC
@ load > 50%	20.2V DC
Low DC Warning Return Voltage	
@load < 20%	23.00V DC
@ 20% < load < 50%	22.4V DC
@ load > 50%	21.2V DC
Low DC Cut-off Voltage	
@load < 20%	21.0V DC
@ 20% < load < 50%	20.4V DC
@ load > 50%	19.6V DC
High DC Recovery Voltage	29V DC
High DC Cut-off Voltage	31V DC
No Load Power Consumption	<5W
Saving Mode Power Consumption	<15W
Transfer Time	6-10mSec
Efficiency	93~ 97%
Charger Mode Specs	
Battery Voltage	24V DC
Floating Charge Voltage	27V DC

Model # HSP3024SW-LCD

Overcharge Protection	30V DC
Maximum Charge Current	80A
Bulk Charging Voltage (Flooded Battery)	29.2V DC
Bulk Charging Voltage (AGM/GEL battery)	28.2V DC
Charging Algorithm	3-Stage (CC-CV-Floating)
Solar Charging Mode Specs	
Maximum PV Array Power	5500W
MPPT Range @ Operating Voltage	120V DC to 450V DC
Maximum PV Array Open Circuit Voltage	500V DC
Maximum Charging Current	100A
Maximum Efficiency	98%
Battery Voltage Accuracy	+/- 0.3%
PV Voltage Accuracy	+/- 2V
Standby Power Consumption	2Watts
Charging Algorithm	3-Stage (CC-CV-Floating)
General Specs	
Dimension (DxWxH-mm)	100x300x410
Net Weight (kgs)	9.5Kgs
Humidity	5% to 95% Relative Humidity (non-condensing)
Operating Temperature	0degC to 55deg C
Storage Temperature	-15degC to 60degC
Parallel Compatibility	Upto 6nos (optional feature)
Communication	RS232 Cable along with monitoring software included
Dry contact for remote management	Yes. Ability to monitor Power OFF/On, LOW DC, Battery voltage, charge status etc
Quality Standards	
Disturbance at Mains Terminals	EN61000-6-3:2007+ A1: 2011+ AC:2012
Radiated Disturbance	EN61000-6-3:2007+ A1: 2011+ AC:2012
Harmonic Current Emission	EN61000-3-12: 2011
Voltage fluctuations & flickering	EN61000-3-11: 2000
Electrostatic Discharge (ESD)	IEC 6100-4-2:2008
Radio-frequency & continuous radiated disturbances	IEC 6100-4-3:2006 + A1:2007 + A2:2010
EFT/B Immunity	IEC 6100-4-4:2012
Surge immunity	IEC 6100-4-5:2014
Conducted RF immunity	IEC 6100-4-6:2013
Power frequency magnetic field	IEC 6100-4-8:2009
Voltage DIP, >95% reduction	IEC 6100-4-11:2004
Voltage DIP, >30% reduction	IEC 6100-4-11:2004
Voltage Interruption	IEC 6100-4-11:2004
EU Low voltage directives (LVD)	EN62109-1: 2010, EN62109-2:2011
EU Electromagnetic compatibility(EMC)	EN62040-2:2006, EN6100-3-2:2014, EN6100-3-3:2013
Quality Certification	ISO9001:2015, ISO14001:2015, CE, RoHs

Model # HSP2024SW-LCD

Magnizon Smart HSP series inverter/charger with duel operational modes with built in Advanced MPPT solar charge controller minimizes the hassles of Solar installation especially in hybrid environments. Large LCD display with functional keys to select various parameters and displays real time information, selecting the modes of operation, Battery charger current settings etc along with operational schemes. Day time will be supported through solar panels and night time or rainy days will be with batteries and Utility power with intelligent microprocessor based automatic switching. Reliable Smart Micro controller technology with advanced IGBT design and frequency controlled power, very much compatible to all varieties of loads: resistive/inductive loads such as refrigerators, motors, pumps, compressors and laser printers as well as electronic loads like TV's, Computers, power tool and battery chargers. Smart micro controller based 3-stage built in charging system properly charge and maintain battery bank in the obscene of solar power or rainy days. The charge rate is selectable so you can use a variety of battery sizes and types to fit your back up time requirements.

.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Health care/Banking/Commercial applications
- Telecom applications

Model # HSP2024SW-LCD

Key features:

- Micro controller based Smart hybrid technology
- Pure sine wave output
- Dual Chargers (Built-in MPPT Solar controller and AC mode battery Charger)
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.

Operational Modes:

- **PV-Grid-Battery:** Magnizon HSP series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # HSP2024SW-LCD

Specifications:

Model	HSP2024SW-LCD
Rated Power	2KVA/2KW
INPUT AC	
Nominal Input Voltage	220/230/240V AC
Low Loss Voltage	170V AC +/- 7V (UPS mode)
	90V AC +/- 7V (Appliances mode)
Low loss return Voltage	180V AC +/- 7V (UPS mode)
	100V AC +/- 7V (Appliances mode)
High loss Voltage	280VAC +/- 7V
High loss Return Voltage	270VAC +/- 7V
Max AC input voltage	300V AC
Frequency Range	50Hz/60Hz (auto sensing)
Low loss frequency	40+/-1Hz
Low loss return frequency	42+/-1Hz
High loss frequency	65+/-1Hz
High loss return frequency	63+/-1Hz
Output Short circuit Protection	Line Mode: Circuit Breaker
	Battery Mode: Electronic Circuits
Efficiency	>97%
OUTPUT AC	
AC Voltage Regulation	220/230/240V AC +/- 5%
Rated Output Power	2KVA/2KW
Output Voltage Waveform	Pure Sine wave
Output Frequency	50Hz/60Hz (auto sensing)
Surge Power	6000VA
Efficiency	95-97%
Over Load protection	5sec @>150% load; 10sec@110~150% load
Nominal DC input Voltage	24V DC
Cold Start Voltage	24.0V DC
Low DC Warning Voltage	
@load < 20%	22.0V DC
@ 20% < load < 50%	21.4V DC
@ load > 50%	20.2V DC
Low DC Warning Return Voltage	
@load < 20%	23.00V DC
@ 20% < load < 50%	22.4V DC
@ load > 50%	21.2V DC
Low DC Cut-off Voltage	
@load < 20%	21.0V DC
@ 20% < load < 50%	20.4V DC
@ load > 50%	19.6V DC
High DC Recovery Voltage	29V DC
High DC Cut-off Voltage	31V DC
No Load Power Consumption	<5W
Saving Mode Power Consumption	<15W
Transfer Time	6-10mSec
Efficiency	93~ 97%
Charger Mode Specs	
Battery Voltage	24V DC
Floating Charge Voltage	27V DC

Model # HSP2024SW-LCD

Overcharge Protection	30V DC
Maximum Charge Current	80A
Bulk Charging Voltage (Flooded Battery)	29.2V DC
Bulk Charging Voltage (AGM/GEL battery)	28.2V DC
Charging Algorithm	3-Stage (CC-CV-Floating)
Solar Charging Mode Specs	
Maximum PV Array Power	1750W
MPPT Range @ Operating Voltage	120V DC to 450V DC
Maximum PV Array Open Circuit Voltage	500V DC
Maximum Charging Current	60A
Maximum Efficiency	98%
Battery Voltage Accuracy	+/- 0.3%
PV Voltage Accuracy	+/- 2V
Standby Power Consumption	2Watts
Charging Algorithm	3-Stage (CC-CV-Floating)
General Specs	
Dimension (DxWxH-mm)	100x300x410
Net Weight (kgs)	9.5Kgs
Humidity	5% to 95% Relative Humidity (non-condensing)
Operating Temperature	0degC to 55deg C
Storage Temperature	-15degC to 60degC
Parallel Compatibility	Upto 6nos (optional feature)
Communication	RS232 Cable along with monitoring software included
Dry contact for remote management	Yes. Ability to monitor Power OFF/On, LOW DC, Battery voltage, charge status etc
Quality Standards	
Disturbance at Mains Terminals	EN61000-6-3:2007+ A1: 2011+ AC:2012
Radiated Disturbance	EN61000-6-3:2007+ A1: 2011+ AC:2012
Harmonic Current Emission	EN61000-3-12: 2011
Voltage fluctuations & flickering	EN61000-3-11: 2000
Electrostatic Discharge (ESD)	IEC 6100-4-2:2008
Radio-frequency & continuous radiated disturbances	IEC 6100-4-3:2006 + A1:2007 + A2:2010
EFT/B Immunity	IEC 6100-4-4:2012
Surge immunity	IEC 6100-4-5:2014
Conducted RF immunity	IEC 6100-4-6:2013
Power frequency magnetic field	IEC 6100-4-8:2009
Voltage DIP, >95% reduction	IEC 6100-4-11:2004
Voltage DIP, >30% reduction	IEC 6100-4-11:2004
Voltage Interruption	IEC 6100-4-11:2004
EU Low voltage directives (LVD)	EN62109-1: 2010, EN62109-2:2011
EU Electromagnetic compatibility(EMC)	EN62040-2:2006, EN6100-3-2:2014, EN6100-3-3:2013
Quality Certification	ISO9001:2015, ISO14001:2015, CE, RoHs

MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-55 [12V 55AH/20HR]

DEEY CYCLE HYBRID GEL BATTERY FOR SOLAR APPLICATION

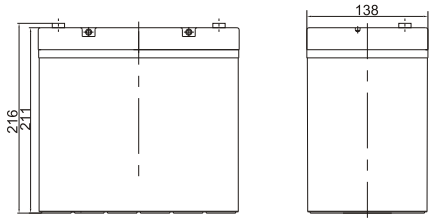
Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	55Ah@20hr-rate to 1.75V per cell @25℃
Weight	Approx. 16.5 Kg (Tolerance± 3.0%)
Internal Resistance	Approx.7.2mΩ
Terminal	F15(M6)/F11(M6)
Max. Discharge Current	550A (5 sec)
Design Life	12 years (floating charge)
Max. Charging Current	16.5 A
Reference Capacity	C3 42.0AH C5 47.4AH C10 52.4AH C20 55.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃± 5℃
Self Discharge	MAGNIZON Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

MG (Deep Cycle) series batteries provide superior high integrity and reliability. It is specially designed for frequent cyclic charge and discharging. By using strong grids, thick plate and specially active material are designed for repeated deep-discharge applications. The MG series batteries offer 30% more cyclic life than the standby series. It is suitable for solar and wind renewable energy storage, mobility and medical equipment and cable TV etc.

ISO 9001 | ISO 14001 | CE | RoHS | OHSAS 18001

Dimensions



Length	229±2mm (9.02 inches)
Width	138±2mm (5.43 inches)
Height	211±2mm (8.31 inches)
Total Height	216±2mm (8.50 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics :A(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	133.5	101.5	59.90	33.40	19.89	15.50	12.16	10.34	6.632	5.500	2.850
1.65V	123.0	94.93	56.74	32.27	19.23	15.02	11.79	10.01	6.579	5.448	2.835
1.70V	114.0	89.27	53.80	31.23	18.71	14.38	11.43	9.744	6.475	5.343	2.800
1.75V	104.6	83.62	51.67	30.25	18.00	14.01	11.12	9.473	6.371	5.290	2.750
1.80V	95.19	76.57	49.77	28.91	17.38	13.75	10.86	9.350	6.266	5.238	2.723
1.85V	74.48	63.36	42.20	25.80	15.89	12.80	10.18	8.607	5.901	4.924	2.698

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	10MIN	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	8HR	10HR	20HR
1.60V	227.4	177.1	108.8	62.71	37.61	29.42	23.43	19.57	12.92	10.79	5.691
1.65V	219.0	172.2	106.3	61.64	36.60	28.69	22.86	19.04	12.82	10.68	5.640
1.70V	204.4	163.0	101.2	59.83	35.68	27.59	22.13	18.57	12.67	10.48	5.589
1.75V	190.2	153.8	97.63	58.17	34.41	26.91	21.61	18.14	12.46	10.37	5.487
1.80V	175.2	142.2	94.47	55.79	33.63	26.76	21.19	17.90	12.25	10.27	5.437
1.85V	139.0	119.5	81.02	50.11	30.97	24.96	19.95	16.56	11.58	9.697	5.386

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C_{20} should reach 95% after the first cycle and 100% after the third cycle.

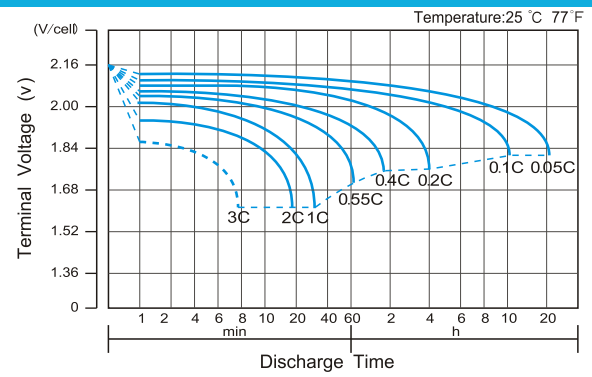
MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

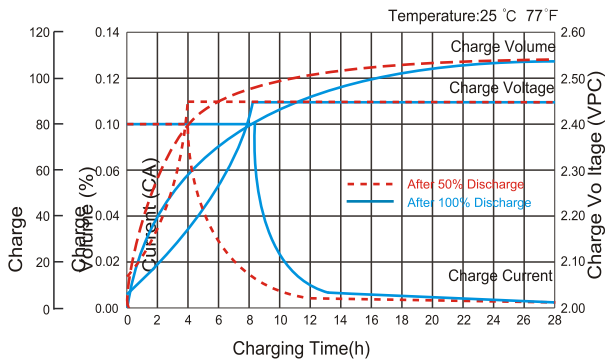
MG12-55 [12V 55AH/20HR]

DEEY CYCLE HYBRID GEL BATTERY FOR SOLAR APPLICATION

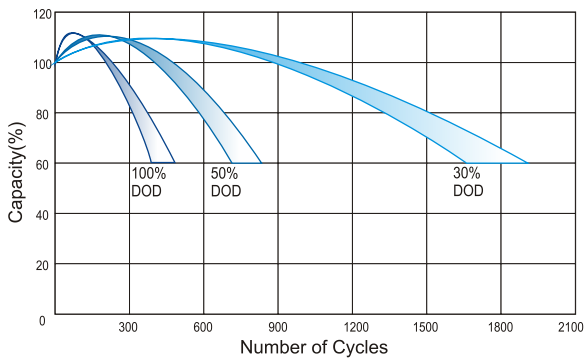
Discharge Characteristics Curve



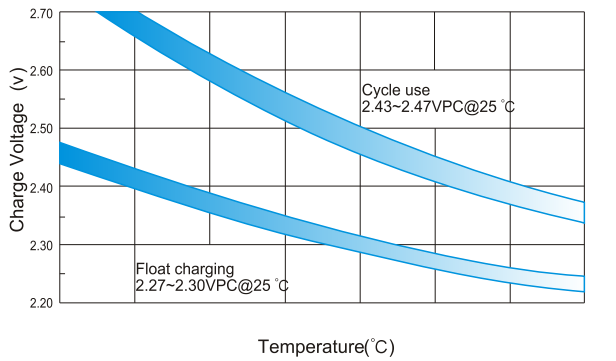
Charge Characteristic Curve for Cycle Use(IU)



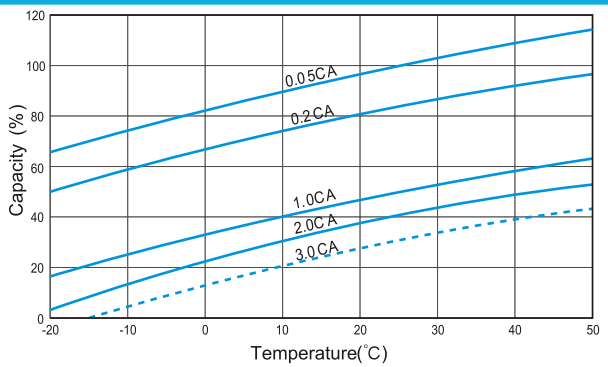
Cycle Life in Relation to Depth of Discharge



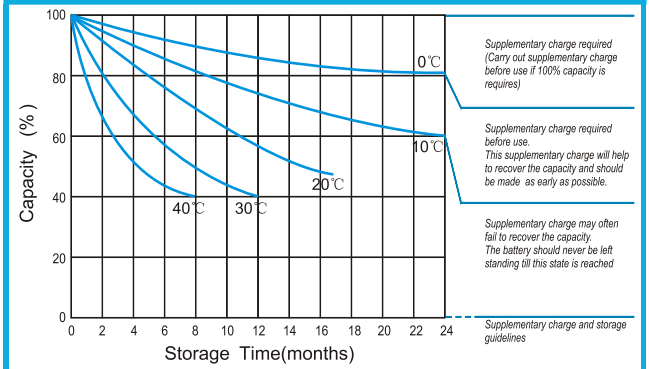
Relationship Between Charging Voltage and Temperature



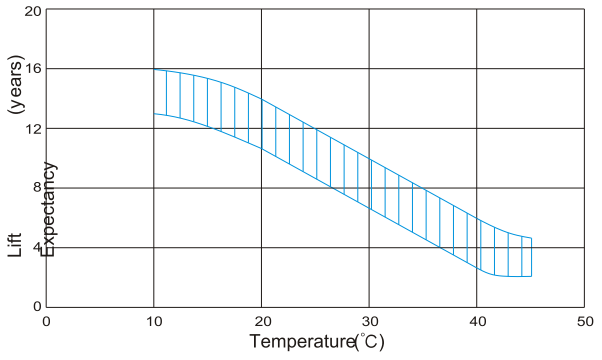
Temperature Effects on Capacity



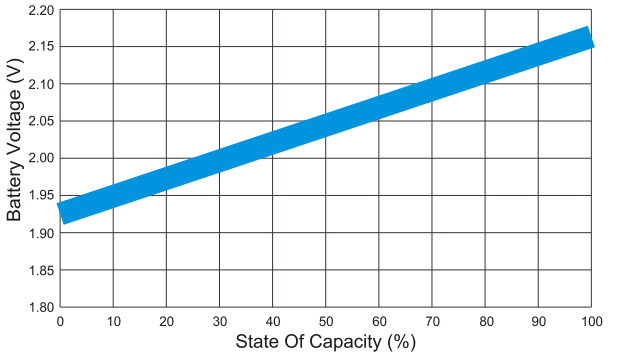
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



(Note) All above information shall be changed without prior notice, MAGNIZON reserves the right to explain and update the latest information

Magnizon MG BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specification are subject to modification without notice. Contact Magnizon for the latest information.

MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG2-250 [2V 250AH/10HR]

PURE GEL BATTERY FOR SOLAR APPLICATION

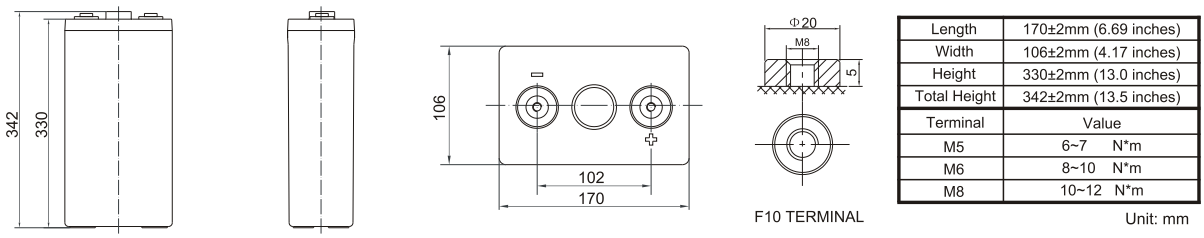
Specification

Cells Per Unit	1
Voltage Per Unit	2
Capacity	250Ah@10hr-rate to 1.80V per cell @25℃
Weight	Approx. 17.5 Kg (Tolerance±3.0%)
Internal Resistance	Approx. 0.86 mΩ
Terminal	F10(M8)
Max. Discharge Current	1250A (5 sec)
Design Life	20 years (floating charge)
Maximum Charging Current	50.0 A
Reference Capacity	C3 195.0AH C5 216.5AH C10 250.0AH C20 266.0AH
Float Charging Voltage	2.27 V~2.30 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	2.37 V~2.40 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -40℃~60℃ Charge: -20℃~50℃ Storage: -40℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	MAGNIZON Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 2% at 20℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

MG(Deep Cycle GEL) series is pure GEL battery with 20 years floating design life , it is ideal for standby or frequent cyclic discharge applications under extreme environments. By using strong grids, high purity lead and patented GEL electrolyte, the MG series offers excellent recovery capability after deep discharge under frequent cyclic discharge use, and it can offers 2 times cyclic life than the standard series. It is suitable for solar & wind system, marine, deep discharge UPS etc.

ISO 9001 | ISO 14001 | CE | RoHS | OHSAS 18001

Dimensions



Length	170±2mm (6.69 inches)
Width	106±2mm (4.17 inches)
Height	330±2mm (13.0 inches)
Total Height	342±2mm (13.5 inches)
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

Constant Current Discharge Characteristics :A(25℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	315.8	244.5	163.5	100.3	73.3	56.3	45.0	40.8	33.3	26.0	14.0
1.65V	300.3	234.8	161.5	96.8	70.3	55.0	44.5	39.8	31.8	25.8	13.8
1.70V	280.0	221.3	158.5	95.3	68.5	53.8	43.8	38.8	31.3	25.5	13.5
1.75V	248.5	199.0	145.8	90.0	65.0	52.0	43.3	36.8	30.3	25.3	13.3
1.80V	214.0	181.3	137.5	85.8	62.5	50.0	42.5	36.3	29.8	25.0	13.0
1.85V	181.0	163.3	127.0	81.0	59.5	48.8	40.0	34.3	28.3	24.3	12.3

Constant Power Discharge Characteristics : WPC(25℃)

F.V/Time	15MIN	30MIN	1HR	2HR	3HR	4HR	5HR	6HR	8HR	10HR	20HR
1.60V	552.8	445.5	304.5	187.8	136.5	99.0	89.3	78.5	63.3	51.8	28.0
1.65V	538.3	443.0	302.8	185.0	133.8	97.5	88.5	77.5	62.8	51.3	27.5
1.70V	508.5	419.3	299.8	182.3	131.8	97.3	87.5	75.8	61.8	51.0	27.0
1.75V	452.8	378.0	281.3	172.8	127.0	92.3	86.3	72.0	59.8	50.5	26.5
1.80V	392.0	344.8	267.5	164.8	121.8	92.0	84.8	71.0	58.8	50.0	26.0
1.85V	334.3	310.8	248.0	156.0	116.0	85.3	80.0	67.3	55.8	48.5	24.5

(Note) The above characteristics data are average values obtained within three charge/discharge cycle not the minimum values.
The battery must be fully charged before the capacity test. The C_{10} should reach 95% after the first cycle and 100% after the third cycle.

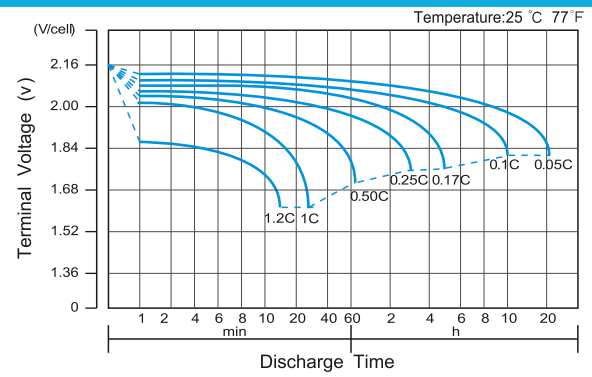
MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

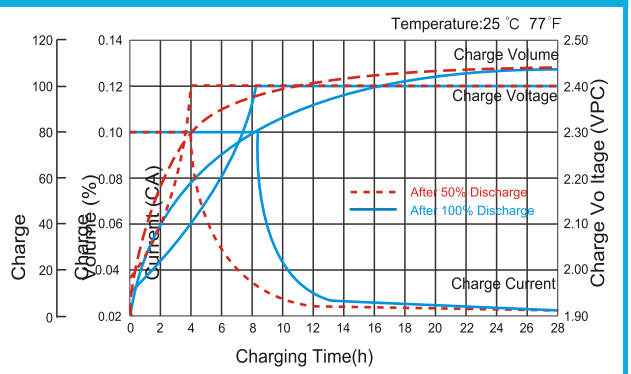
MG2-250 [2V 250AH/10HR]

PURE GEL BATTERY FOR SOLAR APPLICATION

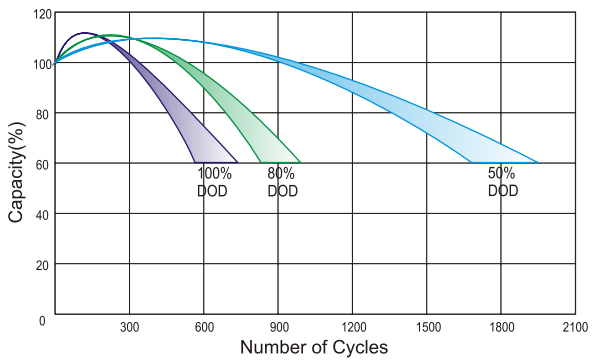
Discharge Characteristics Curve



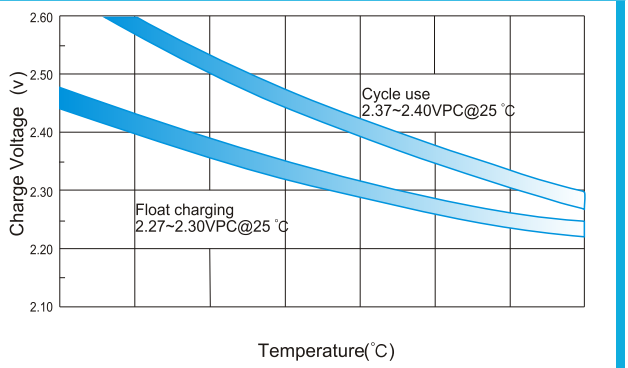
Charge Characteristic Curve for Cycle Use(IU)



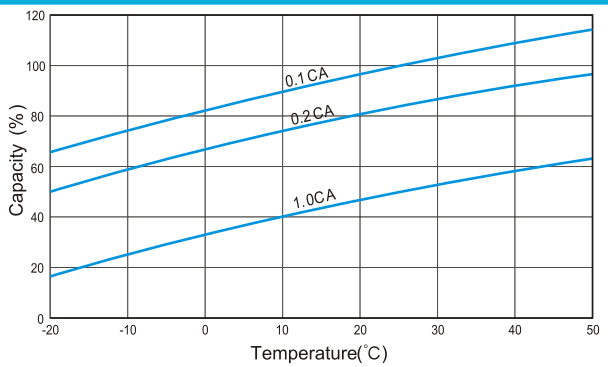
Cycle Life in Relation to Depth of Discharge



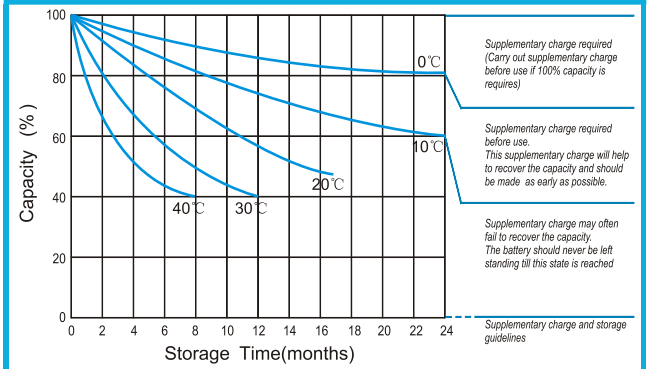
Relationship Between Charging Voltage and Temperature



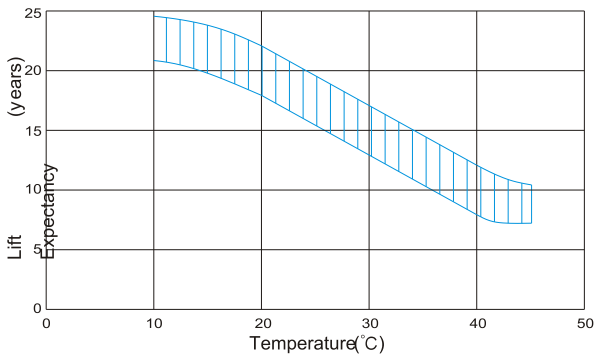
Temperature Effects on Capacity



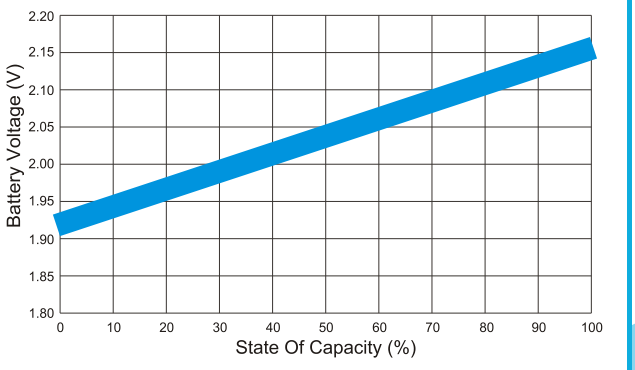
Storage Characteristics



Effect of Temperature on Long Term Life



Relationship of OCV And State of Charge(20℃)



(Note) All above information shall be changed without prior notice, MAGNIZON reserves the right to explain and update the latest information

Magnizon MG BATTERIES

This information is generally descriptive only and is not intended to make or imply any representation, guarantee or warranty with respect to any cells and batteries. Cell and battery designs/specification are subject to modification without notice. Contact Magnizon for the latest information.

MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-200 [12V 200AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	200Ah@20hr-rate to 1.75V per cell @25℃
Dimension	Length 522 ± 2mm (20.6 inches) Width 240 ± 2mm (9.45 inches) Container Height 219 ± 2mm (8.62 inches) Total Height 224 ± 2mm (8.82 inches)
Internal Resistance	Approx. 60.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 4 mΩ
Terminal	F10(M8)/F16(M8)
Max. Discharge Current	2000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	60.0 A
Reference Capacity	C3 147.3AH C5 167.0AH C10 190.0AH C20 200.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	MG Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Applications

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS- for Telecom)
- Solar/Photovoltaic /Wind Energy

ISO 9001 | ISO 14001 | OHSAS 18001 | TLC | CE | RoHS

Constant Current Discharge (Amperes) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	396.7	312.7	253.2	181.3	140.8	113.8	70.3	52.4	41.8	35.3	30.92	24.1	20.4	10.4
1.65V	\	383.5	303.3	246.7	177.5	138.0	111.7	69.1	51.6	41.3	34.8	30.56	23.8	20.2	10.3
1.70V	\	366.2	291.0	238.1	172.4	134.3	108.8	67.5	50.5	40.5	34.2	30.07	23.4	19.9	10.2
1.75V	\	343.1	274.5	226.5	165.6	129.2	104.9	65.3	49.1	39.5	33.4	29.40	22.9	19.5	10.0
1.80V	\	312.3	252.3	210.8	156.2	122.2	99.57	62.3	47.0	38.0	32.3	28.47	22.3	19.0	9.75
1.85V	\	270.1	221.6	188.9	142.9	112.3	91.95	58.0	44.1	35.9	30.7	27.11	21.3	18.2	9.40

Constant Power Discharge (Watts) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	710	575	474.4	347	273.0	224	140	105	84.6	71.6	63.16	49.5	42.2	21.5
1.65V	\	704	570	470.6	344	271.0	222	139	104	83.8	71.0	62.67	49.1	41.9	21.4
1.70V	\	680	552	457.6	336	264.9	217	136	102	82.5	70.0	61.78	48.4	41.3	21.1
1.75V	\	649	528	440.8	326	256.9	210	132	99.9	80.6	68.6	60.56	47.5	40.6	20.8
1.80V	\	601	492	415.2	311	244.8	201	127	96.1	77.9	66.5	58.81	46.2	39.5	20.3
1.85V	\	529	438	376.6	287	227.0	187	119	90.6	73.8	63.4	56.17	44.2	38.0	19.6

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

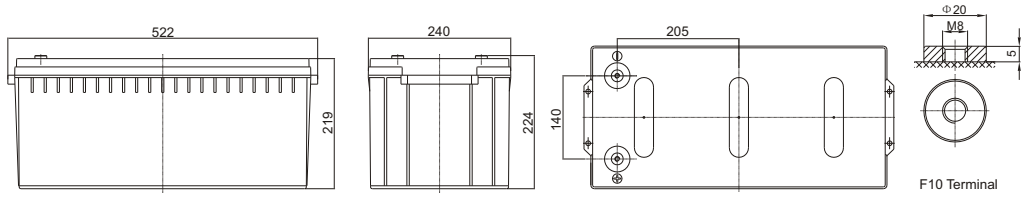
MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-200 [12V 200AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

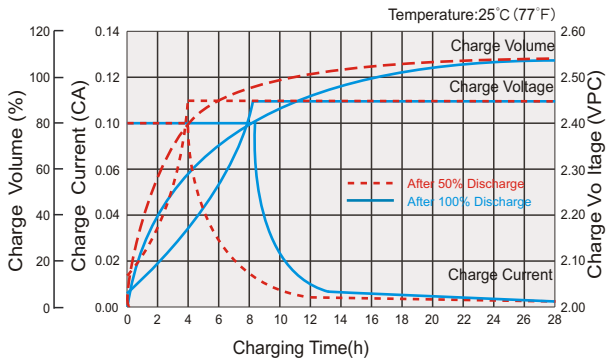
Dimensions



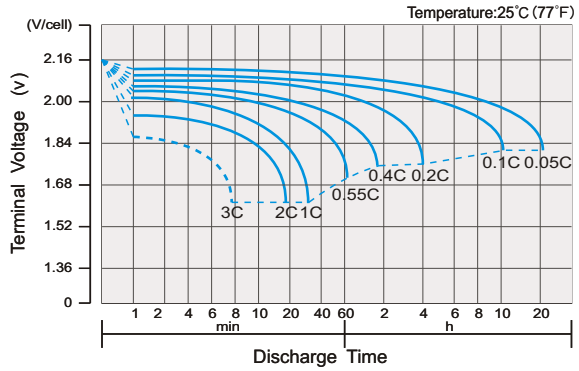
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

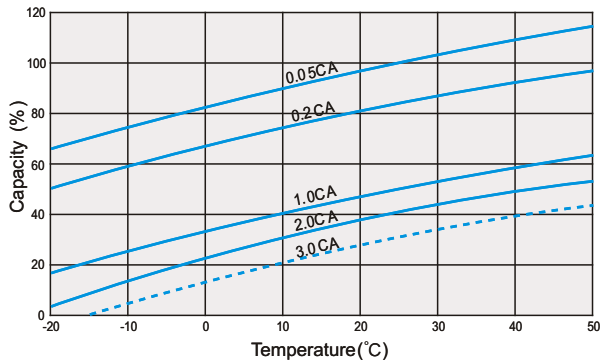
Float Charging Characteristics



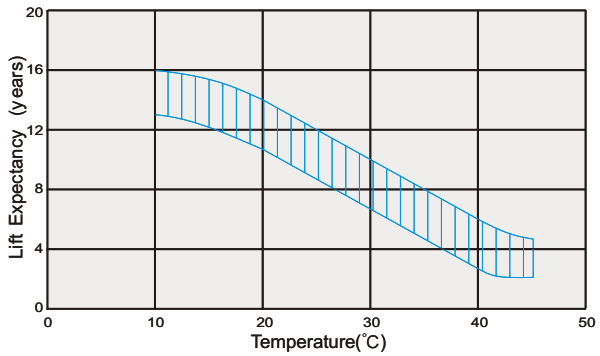
Discharge Characteristics



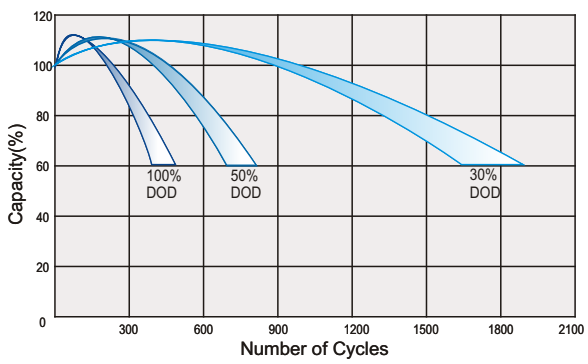
Temperature Effects in Relation to Battery Capacity



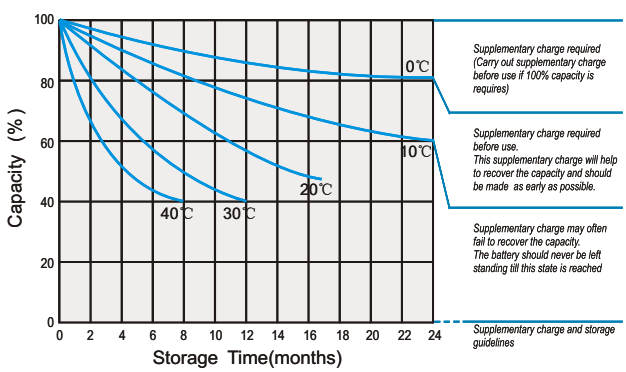
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Magnizon MG BATTERIES

MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-150 [12V 150AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	150Ah@20hr-rate to 1.75V per cell @25℃
Dimension	Length 483 ± 2mm (19.0 inches) Width 170 ± 2mm (6.69 inches) Container Height 241 ± 2mm (9.49 inches) Total Height 350 ± 2mm (9.49 inches)
Weight	Approx. 44.5 Kg (Tolerance±2%)
Internal Resistance	Approx. 4.2 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1500A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	45 A
Reference Capacity	C3 111.6AH C5 125.5AH C10 143.0AH C20 150.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	MG Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Applications

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS- for Telecom)
- Solar/Photovoltaic /Wind Energy

ISO 9001 | ISO 14001 | OHSAS 18001 | TLC | CE | RoHS | PV Battery

Constant Current Discharge (Amperes) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	317.7	244.9	199.3	143.4	105.9	86.2	52.7	39.6	31.3	26.4	23.19	18.0	15.2	7.7
1.65V	\	307.2	237.5	194.2	140.4	103.8	84.6	51.8	39.0	30.9	26.1	22.92	17.8	15.1	7.7
1.70V	\	293.3	227.9	187.5	136.5	101.0	82.4	50.6	38.2	30.3	25.6	22.55	17.5	14.9	7.6
1.75V	\	274.9	215.0	178.3	131.0	97.1	79.5	48.9	37.1	29.5	25.0	22.05	17.2	14.6	7.4
1.80V	\	250.1	197.6	166.0	123.6	91.8	75.4	46.7	35.6	28.4	24.2	21.35	16.6	14.2	7.3
1.85V	\	216.3	173.6	148.7	113.1	84.4	69.6	43.5	33.4	26.8	23.0	20.33	15.9	13.6	7.0

Constant Power Discharge (Watts) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	568.6	450.7	373.5	274.3	205.2	169.7	105.1	79.7	63.4	53.6	47.3	37.1	31.6	16.1
1.65V	\	564.2	446.4	370.5	272.6	203.7	168.3	104.1	79.0	62.8	53.2	47.0	36.8	31.3	16.0
1.70V	\	544.8	432.0	360.3	266.3	199.1	164.5	102.0	77.6	61.8	52.4	46.3	36.3	30.9	15.8
1.75V	\	519.7	413.4	347.1	258.4	193.1	159.5	99.2	75.6	60.4	51.4	45.4	35.6	30.4	15.6
1.80V	\	481.2	385.3	327.0	246.2	184.1	152.0	95.1	72.8	58.4	49.8	44.1	34.6	29.6	15.2
1.85V	\	423.6	343.3	296.6	227.5	170.6	141.4	89.0	68.6	55.3	47.5	42.1	33.1	28.4	14.7

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

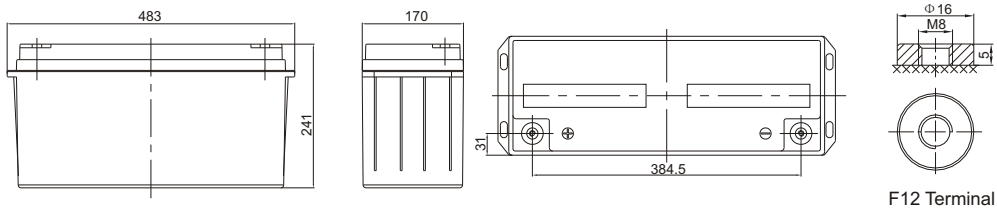
MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-150 [12V 150AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

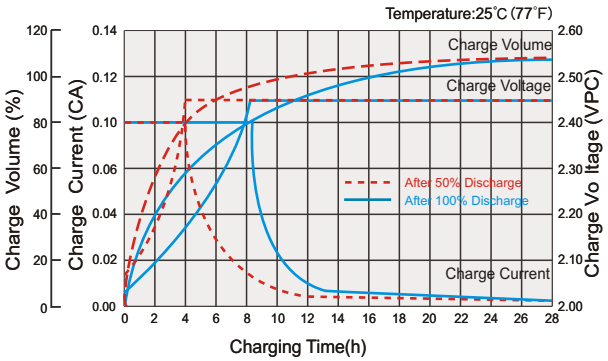
Dimensions



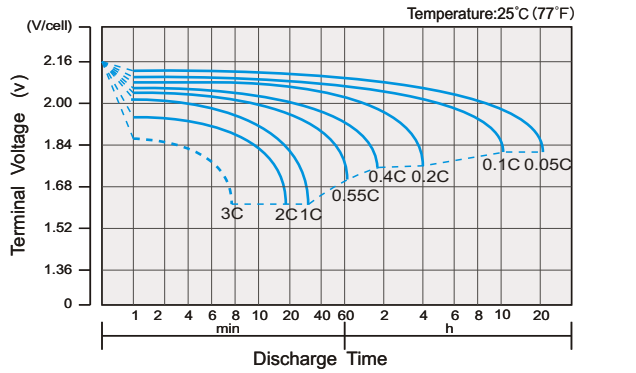
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

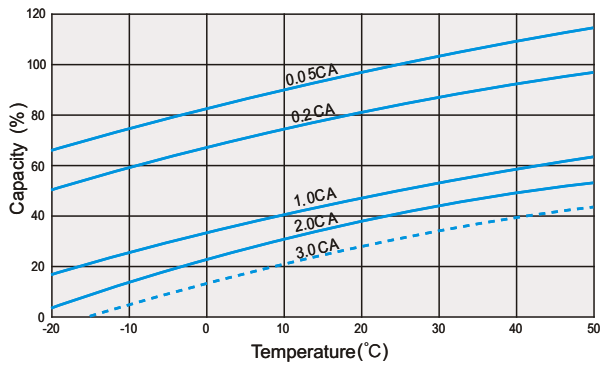
Float Charging Characteristics



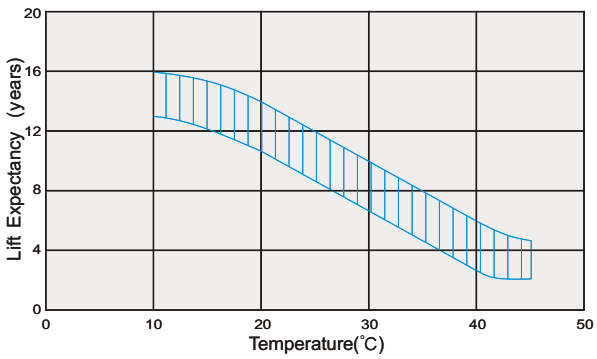
Discharge Characteristics



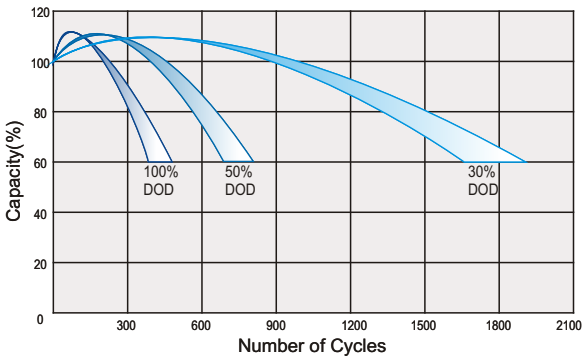
Temperature Effects in Relation to Battery Capacity



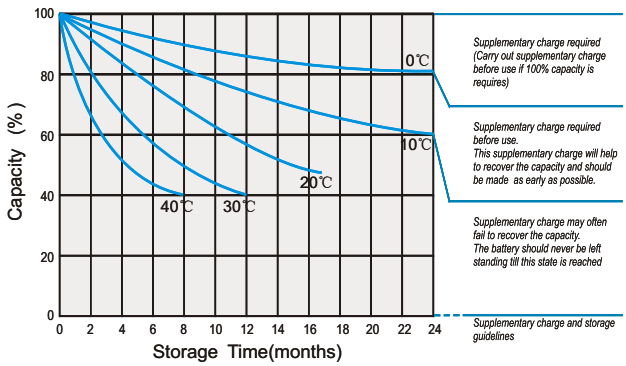
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Magnizon MG BATTERIES

MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-100 [12V 100AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

Applications

- Tele-communication central station (wired or cellular)
- Power system communication, military communication, etc.
- Network communication including: data transmission, television signal transmission, etc.
- Uninterruptable Power System (UPS- for Telecom)
- Solar/Photovoltaic /Wind Energy

ISO 9001 | ISO 14001 | OHSAS 18001 | TLC | CE | RoHS

Specification

Cells Per Unit	6
Voltage Per Unit	12
Capacity	100Ah@20hr-rate to 1.75V per cell @25℃
Dimension	Length 328 ± 2mm (12.9 inches) Width 172 ± 2mm (6.77 inches) Container Height 215 ± 2mm (8.46 inches) Total Height 220 ± 2mm (8.66 inches)
Weight	Approx. 30.0 Kg (Tolerance±2%)
Internal Resistance	Approx. 5 mΩ
Terminal	F12(M8)/F5(M8)
Max. Discharge Current	1000A (5 sec)
Design Life	12 years (floating charge)
Maximum Charging Current	30.0 A
Reference Capacity	C3 74.4AH C5 83.5AH C10 95.0AH C20 100.0AH
Float Charging Voltage	13.6 V~13.8 V @ 25℃ Temperature Compensation: -3mV/℃/Cell
Cycle Use Voltage	14.6 V~14.8 V @ 25℃ Temperature Compensation: -4mV/℃/Cell
Operating Temperature Range	Discharge: -20℃~60℃ Charge: 0℃~50℃ Storage: -20℃~60℃
Normal Operating Temperature Range	25℃±5℃
Self Discharge	MG Valve Regulated Lead Acid (VRLA) batteries can be stored for up to 6 months at 25℃ and then recharging is recommended. Monthly Self-discharge ratio is less than 3% at 25℃.Please charged batteries before using.
Container Material	A.B.S. UL94-HB, UL94-V0 Optional.

Constant Current Discharge (Amperes) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	225.4	173.7	140.7	100.7	73.57	59.3	35.5	26.5	20.9	17.6	15.46	12.0	10.2	5.20
1.65V	\	217.9	168.5	137.1	98.59	72.10	58.2	34.9	26.1	20.6	17.4	15.28	11.9	10.1	5.15
1.70V	\	208.1	161.7	132.3	95.79	70.15	56.7	34.1	25.5	20.3	17.1	15.04	11.7	10.0	5.09
1.75V	\	195.0	152.5	125.8	91.99	67.50	54.6	33.0	24.8	19.7	16.7	14.70	11.5	9.77	5.00
1.80V	\	177.4	140.2	117.1	86.77	63.85	51.9	31.5	23.8	19.0	16.2	14.23	11.1	9.50	4.88
1.85V	\	153.5	123.1	104.9	79.39	58.68	47.9	29.3	22.3	17.9	15.4	13.56	10.6	9.12	4.70

Constant Power Discharge (Watts) at 25 ℃ (77°F)

F.V/Time	5min	10min	15min	20min	30min	45min	1h	2h	3h	4h	5h	6h	8h	10h	20h
1.60V	\	403.3	319.6	263.6	192.5	142.6	117	70.8	53.2	42.3	35.8	31.58	24.7	21.1	10.8
1.65V	\	400.2	316.6	261.5	191.3	141.5	116	70.1	52.7	41.9	35.5	31.33	24.5	20.9	10.7
1.70V	\	386.5	306.4	254.2	186.9	138.4	113	68.7	51.7	41.2	35.0	30.89	24.2	20.7	10.6
1.75V	\	368.6	293.3	244.9	181.4	134.2	110	66.8	50.5	40.3	34.3	30.28	23.7	20.3	10.4
1.80V	\	341.3	273.3	230.7	172.8	127.9	105	64.1	48.6	39.0	33.3	29.41	23.1	19.8	10.2
1.85V	\	300.5	243.5	209.2	159.7	118.5	97.2	60.0	45.8	36.9	31.7	28.08	22.1	19.0	9.80

Note The above data are average values, and can be obtained with 3 charge/discharge cycles. These are not minimum values.

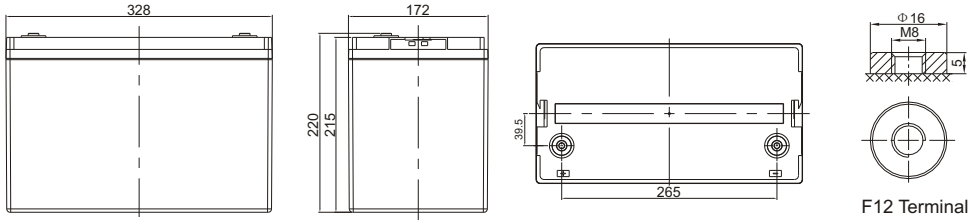
MAGNIZON
GREEN ENERGY

Magnizon Power Systems FZE

MG12-100 [12V 100AH/20HR]

Deep Cycle Hybrid Gel Battery for Solar Application

Dimensions

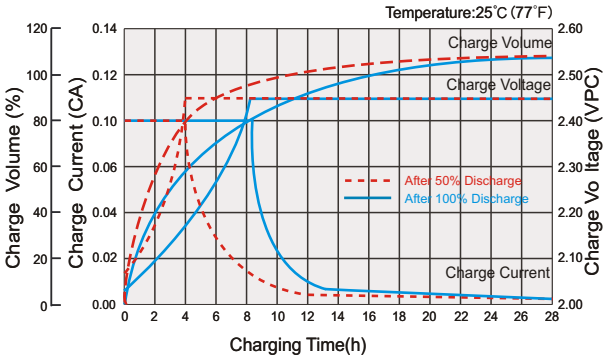


F12 Terminal

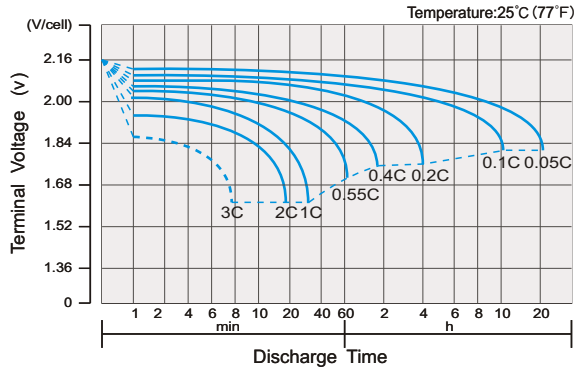
Terminal	Value
M5	6~7 N*m
M6	8~10 N*m
M8	10~12 N*m

Unit: mm

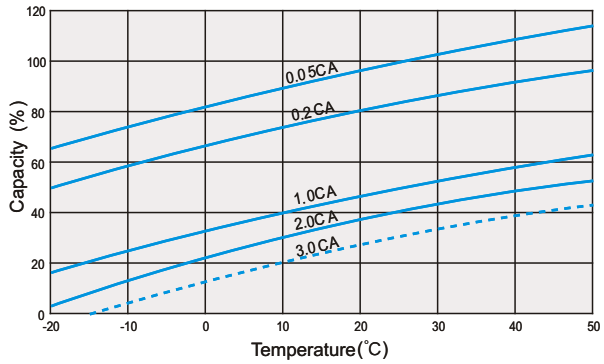
Float Charging Characteristics



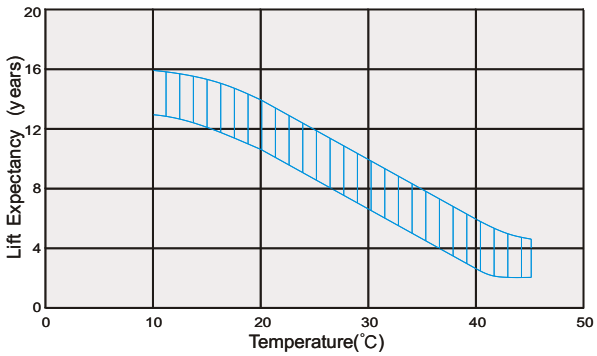
Discharge Characteristics



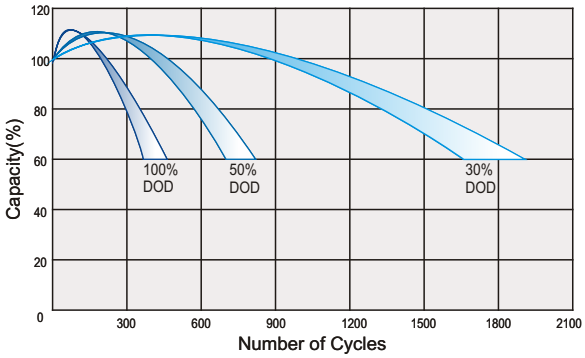
Temperature Effects in Relation to Battery Capacity



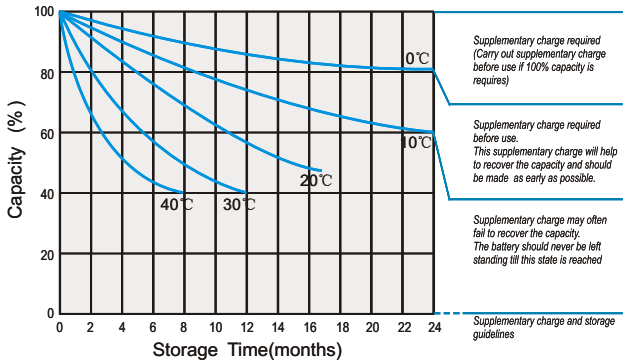
Effect of Temperature on Long Term Float Life



Cycle Life in Relation to Depth of Discharge



Self Discharge Characteristics



Magnizon MG BATTERIES

MAGNIZON
GREEN ENERGY

Model # MEVAD142K

3-Ph, 380/400/415V, 50/60Hz, 142KW Magnizon's AC-DC Fast EV charging stations with 3guns

Product Description:

MEVAD142K is a Magnizon's fast EV DC charger with 2x60KW DC charging guns and **1x22KW AC** charging gun suitable for European cars. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Model # MEVAD142K

Types of connectors:

- CCS2, CHAdeMO and CCS2 AC
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Key Features:

- Featured with dual technology allowing simultaneous charging in DC and AC.
- Supports CCS 2 combo, CHAdeMO and CCS 2 AC functionality
- Features in three outlets: a 60KW DC ports (European standard), a 60KW DC ports (Japanese standard) and a 22KW AC port (European standard)
- High efficiency, high power factor, low input harmonic current, no need for additional reactive power compensation and harmonic suppression equipment
- Hot-swap modular design, easy maintenance
- Daylight readable 7" touchscreen display
- EV standards: IEC 62196, IEC 61851, JEVS G105
- OCPP and network connectivity enabling system integration
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A CHAdeMO (Japan)	System B GB/T (PRC)	System C COMBO1 (US)	 COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVAD142K

Specifications:

MODEL	MEVD142K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤360 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	200Amp
DC Ouput power	2x60KW DC and 1x22KW AC EU type
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +50°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	380Kgs

Model # MEVA44K

3-Ph, 380/400/415V, 50/60Hz, 44KW AC Magnizon's Smart AC EV charging stations

Product Description:

MEVA44K is a Magnizon's fast EV AC 44KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support AC Mode-2 standards. This all-in-one AC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- AC type 2 connectors- 2nos

Model # MEVA44K

Key Features:

- Compact and contemporary design
- 44KW/22KW continuous charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 4.5” Graphical user interface for status and configurations
- Double outlets AC MODE2
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations /Shopping malls
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes and many more

Specifications:

MODEL	MEVA44K
INPUT / OUTPUT	
Voltage	380/400/415 Vac (three phase five wire: L1, L2, L3, N, PE)
Current	63 A
Capacity	44KW (2x22KW)
Frequency	50/60 ± 5 Hz
Noise	< 55 dB
HUMAN-MACHINE INTERACTION INTERFACE	
Monochrome screen	4.3” full color touch screen
LED indicator	Available
Swipe card reader	Contactless swipe card reader
APP operation	Support

Model # MEVA44K

CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m optional
Charging interface	AC TYPE-2 PLUG
Standards	IEC 62196, IEC 61851
Uplink communication	OCPP v 1.6 or above - 10/100 Base-T Ethernet (Standard)/ Optical GSM Modem (3G/4G) or Wireless(WIFI)
Power meter	Optional AC electric meter (Approved Standards :MID:IEC62053-21/ EN50470-1/3)
PROTECTION	
Short circuit protection	Support (manual recovery)
Over and under voltage protection	Support (automatic recovery)
Overload protection	Support (manual recovery)
Electricity leakage protection	Support (automatic recovery) : RCD TYPE B
OTHERS	
Operating temperature	-20℃ ~ +50℃
Storage temperature	-40℃ ~ +80℃
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP55
Dimensions (W × D × H) (mm)	320 x 300 x 1450
Packaged dimensions (W × D × H) (mm)	340 x 320 x 1500
Net weight (kg)	78
Gross weight (kg)	94

MAGNIZON
GREEN ENERGY

Model # MEVD180K

3-Ph, 380/400/415V, 50/60Hz, 180KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD180K is a Magnizon's fast EV DC 180KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD180K

Key Features:

- Compact and contemporary design
- 90/90KW or 180KW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD180K

Specifications:

MODEL	MEVD180K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤360 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	200Amp
DC Ouput power	180KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +50°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	380Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD120K

3-Ph, 380/400/415V, 50/60Hz, 120KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD120K is a Magnizon's fast EV DC 120KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD120K

Key Features:

- Compact and contemporary design
- 120KW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD120K

Specifications:

MODEL	MEVD120K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤200 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	200Amp
DC Ouput power	120KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +50°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	380Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD30K

3-Ph, 380/400/415V, 50/60Hz, 30KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD30K is a Magnizon's fast EV DC 30KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD30K

Key Features:

- Compact and contemporary design
- 20 kW/30kW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD30K

Specifications:

MODEL	MEVD30K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤60 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	100Amp
DC Output power	30KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 60 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20℃ ~ +60℃
Storage temperature	-40℃ ~ +80℃
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	900x720x1600mm
Weight (kg)	260Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD20K

3-Ph, 380/400/415V, 50/60Hz, 20KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD20K is a Magnizon's fast EV DC 20KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD20K

Key Features:

- Compact and contemporary design
- 20 kW/30kW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD20K

Specifications:

MODEL	MEVD20K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤60 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	66.6A (@300 V) / 20 A (@ 1000 V)
DC Output power	20KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 60 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20℃ ~ +60℃
Storage temperature	-40℃ ~ +80℃
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	610*760*860
Weight (kg)	120Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD60K

3-Ph, 380/400/415V, 50/60Hz, 60KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD60K is a Magnizon's fast EV DC 60KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD60K

Key Features:

- Compact and contemporary design
- 20 kW/30kW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD60K

Specifications:

MODEL	MEVD60K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤100 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	150Amp
DC Ouput power	60KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20℃ ~ +60℃
Storage temperature	-40℃ ~ +80℃
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	310Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD50K

3-Ph, 380/400/415V, 50/60Hz, 50KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD50K is a Magnizon's fast EV DC 50KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD50K

Key Features:

- Compact and contemporary design
- 20 kW/30kW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD50K

Specifications:

MODEL	MEVD50K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤60 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	150Amp
DC Output power	50KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +60°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	310Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD40K

3-Ph, 380/400/415V, 50/60Hz, 40KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD40K is a Magnizon's fast EV DC 40KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD40K

Key Features:

- Compact and contemporary design
- 20 kW/30kW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD40K

Specifications:

MODEL	MEVD40K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤80 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	133Amp
DC Output power	40KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 60 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +60°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	900x720x1600mm
Weight (kg)	260Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD90K

3-Ph, 380/400/415V, 50/60Hz, 90KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD90K is a Magnizon's fast EV DC 90KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD90K

Key Features:

- Compact and contemporary design
- 90KW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD90K

Specifications:

MODEL	MEVD90K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤140 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	200Amp
DC Ouput power	90KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +60°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	380Kgs

MAGNIZON
GREEN ENERGY

Model # MEVD80K

3-Ph, 380/400/415V, 50/60Hz, 80KW DC Magnizon's Smart DC Fast EV charging stations

Product Description:

MEVD80K is a Magnizon's fast EV DC 80KW charger with two charging guns. It can deploy charging network rapidly and effectively, providing high-power quick charging service for all brands of electric vehicles. It has a durable, robust, all-weather enclosure for indoor and outdoor use and support CCS & CHAdeMO standards. This all-in-one DC charger consists of billing control unit, charging control unit, charging module and input / output power distribution unit. It is applicable for expressway, urban public parking station and enterprises' parking lot.

Types of connectors:

- CCS + CHAdeMO defult,
- AC type 2 connectors
- Optional Multiple configuration (CCS2 , CHAdeMO, type T2)

Model # MEVD80K

Key Features:

- Compact and contemporary design
- 80KW continuous fast charging
- Robust, all-weather enclosure for indoor and outdoor use(IP54)
- Highest efficiency in the range : 97%
- 7” Graphical user interface for status and configurations
- Single outlet: CCS or CHAdeMO
- Daylight readable 7” full color touchscreen display
- RFID reader RFID and ISO 15118 user identification
- Future proof connectivity:
- OCPP and network connectivity enabling system integration
- Capability for remote services
- Future proof due to DC output voltage range from 200 to 1000 VDC supporting most kinds of electric vehicles.
- EV standards: IEC 62196, IEC 61851, JEVS G105

Applications:

- Highway Service Stations
- Short term Parking Offices and Commercial Buildings
- Public operations such as highway rest stops, petrol stations, airport etc
- Private operations such as EV dealers, EV fleets etc.
- Compatible vehicles: BMW, Volkswagen, GM, Porsche, Audi, Nissan, Mitsubishi, Peugeot, Citroen, Kia, Renault, Daimler, Tesla, Smart, Mercedes

Optional Charger connections:

IEC DC Charging Systems

	System A	System B	System C	
	CHAdeMO (Japan)	GB/T (PRC)	COMBO1 (US)	COMBO2 (DE)
Connector				
Vehicle Inlet				

Model # MEVD80K

Specifications:

MODEL	MEVD80K
INPUT	
Input voltage	260 ~ 470 V (three-phase five-wire)
Input current	≤125 A
AC input frequency	40 ~ 70 Hz
Efficiency	≥ 97%
Power factor	≥ 0.99
Input THD	≤ 5%
OUTPUT	
Output voltage range	200 ~1000 V
Rated output current	180Amp
DC Ouput power	80KW
DC Voltage Ripple + Noise	500 mVp-p
DC Current Ripple	<1 Arms @ Rated Power
Soft start time	3 ~ 8 s
Voltage regulation accuracy	≤ ± 0.5%
Current regulation accuracy	≤ ± 1%
Ripple coefficient (peak value)	≤ ± 0.5%
Current-sharing unbalanced degree	≤ ± 5% (50% ~ 100% rated load)
Noise	< 65 dB
Protection	Overcurrent, Under voltage, Overvoltage, Residual current, Surge, Short circuit, Ground fault, Emergency shutdown alarm, Over temp, Electric shock, Input phase reversal, Plug out protection
CHARGING CONFIGURATION AND STANDARD	
Number of charging plugs	2
Charging cable length	5 m
Charging protocols	CCS and CHAdeMO
DC Output plug Types Options	CCS2, CCS1, CHAdeMO, GB/T
HMI	7" graphical LCD, Push buttons for commands
Support Languages	Dual language (Local plus English)
Power Management	Configurable dynamic load distribution (dual DC outputs)
User Authentication	ISO / IEC 14443 A / B Mifare RFID reader
Network Interface	Ethernet, GSM/3G/4G, Wifi/WLAN, Bluetooth
Communication Protocol	OCPP 1.6, others by request
Standards	IEC 62196, IEC 61851 , JEVS G105
Quality Standards	ISO9001:2015, ISO14001:2015, RoHs
OTHERS	
Operating temperature	-20°C ~ +60°C
Storage temperature	-40°C ~ +80°C
Relative humidity	≤ 95%
Atmospheric pressure	70 kPa ~ 106 kPa
IP rating	IP 54
Dimensions (W × D ×H) (mm)	1010x760x1860
Weight (kg)	350Kgs

Model # APS30K3

Magnizon APS30K3 series solar inverter is a three phase 30KVA/27KW smart hybrid inverter. These inverters are smart multifunctional intelligent power supply, which consists of built-in MPPT solar controller modules of 1x25KW scalable upto 75KW, charger, rectifier, inverter, static transfer switch, main control circuit and display alarming circuit. User can set different inverter work mode according to users' actual applications.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Banking & commercial applications
- Telecom applications
- Data centers

Model # APS30K3

Key features:

- Pure sine wave output
- Built-in MPPT Solar controller
- Adopt 4 layer PCD and SMD technology
- Can choose the AC charger from front panel
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **High efficiency IGBT inverter technology:** Advanced 6th generation low-exhaust and big power IGBT with excellent high speed switch features, high voltage feature and large current features. Drives by electric voltage, only need small control power. 6th generation with lower saturation voltage, the inverter has high efficiency, low temperature, high reliability
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.
- **High-powered dynamic feature:** Adopt kinds of feedback control such as instantaneous control mode and virtual value, not only reach the high dynamic adjustment, but also reduce the output voltage distortion.

Model # APS30K3

Specifications:

Model	APS30K3
Capacity (KVA)	30KVA
Capacity (KW)	27KW
Grid (AC Input)	
Max input current (A)	45Amp
Type	Three Phase (3P+N+G)
Line-Neutral voltage	220/230/240VAC±25% (100/110/120VAC is optional)
line-line voltage	380/400/4150VAC±25% (200/208/220VAC is optional)
Input frequency	50/60Hz±5%
Charge voltage	407V±1%
Charge current	ON or OFF, Can adjust through panel switch
PV INPUT	
PV Optimum Operating Voltage(Vmp	450VDC~550VDC
PV Max voltage (Voc)	750Vdc
PV Input Nominal DC bus	360V DC
Float charge Voltage	414Vdc +/- 1%
Equilizing charge Voltage	428Vdc =/-1%
MPPT maximum current	120Amp
Maximum PV power	1x25KWp
No of MPPT modules/PV inputs	1nos of 25KW (1+2, 2modules reserved , capacity up to 75KWp)
Maximum MPPT efficiency	98%
Battery management	
Type	Maintenance free lead-acid battery (other type battery need customize)
Battery voltage	360Vdc (2V battery 180pcs in serial or 12V battery 30pcs in serial)
Battery capacity	According to backup time
Battery low voltage protection	>315V
Battery EOD Settings	1.58Vdc to 1.83Vdc(settable), 1.75Vdc (default)
Staggering DOD Settings	1.85Vdc to 2.1Vdc(settable), 1.89Vdc (default)
Charge Current settings	Factory default 0.15 C10; 0.07 to 0.3 C10 (settable based on connected Battery AH
Battery management	Auto Transfer between equalizing charge and float charge; Auto-Temperature compensation of batteries
AC Rectifier	
AC Input Voltage range	3-Ph, 380/400/415Vac +/- 20%
Rated Frequency	50/60Hz auto detect +/-5Hz

Model # APS30K3

Power factor	0.9
Float charge voltage	410Vdc +/-1%
Equalizing charge voltage	415Vdc +/-1%
Battery charge Current	15Amp
Inverter (Output)	
Inverter output waveform	Pure sine wave, THD<3% (linear load)
Line-Neutral Voltage	220/230/240VAC±2% (100/110/120VAC is optional)
Line-line Voltage	380/400/415VAC±2% (200/208/220VAC is optional)
Frequency	50/60Hz±0.5%
Rated Output Current	42Amp
Output voltage precession	+/- 1% of nominal output voltage
Transient voltage Dynamic feature	Inverter output transient dynamic range less than±5%, recovery time <20m S
Crest factor	03:01
THDi	>3%
Overload protection	(Inverter output)125% overload, delay 1mins protect, 150% overload, imme diate protect
Over Load capacity	110% for 1hr, 125% for 10min, 150% for 1min, More than 150% for 10sec,> 200% shutdown immediately
Inverter efficiency	>94% (100% load)
Bypass	
Rated Voltage	3-Ph, 380/400/415VAC±2% (200/208/220VAC is optional)
Input Voltage range	+/-20% of Nominal Voltage
Rated Frequency	50/60Hz +/-5Hz
Max Bypass current	45Amp
System Parameters	
Transfer time	0mSec (inverter--bypass)
Protection	Output short circuit, overload, overvoltage, under voltage, over temperature etc protection, have audible and visual alarm
Display	LCD display input and output voltage, output current, the inverter voltage, fr equency, output current, battery voltage, PV voltage, PV charging current, t emperature mode, flowcharts, current work status, event record and system information
Operating environment	Temperature 0-40℃
Relative humidity	30%-95%
Work sequence	Solar-Grid-Battery or Solar –battery-Grid, Can choose one of the mode via LCD panel
Operation altitude (max)	<1000 meters (per increase 100 meters power decrease 1%, at most 4000 meters)
Noise Level	<65dB(varies with load and temperature)
IP Rating	IP20 (indoor applications)
Computer communicate interface	RS232/RS485 Standard, SNMP/Wifi/GPRS Modules as optional

Model # APS30K3

Remote control	Inverter Start-up, Shutdown, Abnormal clearance, EPO, Battery self test
Standards	ISO9001:2015, ISO14001:2015, CE/EMS/IEC
Cooling method	force-air cooling
Unit Size W×D×H (unit: mm)	600x700x1750
Shipping Size WxDxH (mm)	700x800x1950
Net /Gross Weight (kg)	360Kgs/380KGs

Operational Modes:

- **PV-Grid-Battery:** Magnizon APS-K3 series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # APS20K3

Magnizon APS20K3 series solar inverter is a three phase 20KVA/18KW smart hybrid inverter. These inverters are smart multifunctional intelligent power supply, which consists of built-in MPPT solar controller modules of 1x25KW, charger, rectifier, inverter, static transfer switch, main control circuit and display alarming circuit. User can set different inverter work mode according to users' actual applications.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Banking & commercial applications
- Telecom applications

Model # APS20K3

Key features:

- Pure sine wave output
- Built-in MPPT Solar controller
- Adopt 4 layer PCD and SMD technology
- Can choose the AC charger from front panel
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **High efficiency IGBT inverter technology:** Advanced 6th generation low-exhaust and big power IGBT with excellent high speed switch features, high voltage feature and large current features. Drives by electric voltage, only need small control power. 6th generation with lower saturation voltage, the inverter has high efficiency, low temperature, high reliability
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.
- **High-powered dynamic feature:** Adopt kinds of feedback control such as instantaneous control mode and virtual value, not only reach the high dynamic adjustment, but also reduce the output voltage distortion.

Model # APS20K3

Specifications:

Model	APS20K3
Capacity (KVA)	20KVA
Capacity (KW)	18KW
Grid (AC Input)	
Max input current (A)	32Amp
Type	Three Phase (3P+N+G)
Line-Neutral voltage	220/230/240VAC±25% (100/110/120VAC is optional)
line-line voltage	380/400/4150VAC±25% (200/208/220VAC is optional)
Input frequency	50/60Hz±5%
Charge voltage	407V±1%
Charge current	ON or OFF, Can adjust through panel switch
PV INPUT	
PV Optimum Operating Voltage(Vmp	450VDC~550VDC
PV Max voltage (Voc)	750Vdc
PV Input Nominal DC bus	360V DC
Float charge Voltage	414Vdc +/- 1%
Equilizing charge Voltage	428Vdc =/-1%
MPPT maximum current	60Amp
Maximum PV power	1x25KWp
No of MPPT modules/PV inputs	1nos of 25KW (1+1, 1modules reserved)
Maximum MPPT efficiency	98%
Battery management	
Type	Maintenance free lead-acid battery (other type battery need customize)
Battery voltage	360Vdc (2V battery 180pcs in serial or 12V battery 30pcs in serial)
Battery capacity	According to backup time
Battery low voltage protection	>315V
Battery EOD Settings	1.58Vdc to 1.83Vdc(settable), 1.75Vdc (default)
Staggering DOD Settings	1.85Vdc to 2.1Vdc(settable), 1.89Vdc (default)
Charge Current settings	Factory default 0.15 C10; 0.07 to 0.3 C10 (settable based on connected Battery AH
Battery management	Auto Transfer between equalizing charge and float charge; Auto-Temperature compensation of batteries
AC Rectifier	
AC Input Voltage range	3-Ph, 380/400/415Vac +/- 20%
Rated Frequency	50/60Hz auto detect +/-5Hz

Model # APS20K3

Power factor	0.9
Float charge voltage	410Vdc +/-1%
Equalizing charge voltage	415Vdc +/-1%
Battery charge Current	15Amp
Inverter (Output)	
Inverter output waveform	Pure sine wave, THD<3% (linear load)
Line-Neutral Voltage	220/230/240VAC±2% (100/110/120VAC is optional)
Line-line Voltage	380/400/415VAC±2% (200/208/220VAC is optional)
Frequency	50/60Hz±0.5%
Rated Output Current	30Amp
Output voltage precession	+/- 1% of nominal output voltage
Transient voltage Dynamic feature	Inverter output transient dynamic range less than±5%, recovery time <20m S
Crest factor	03:01
THDi	>3%
Overload protection	(Inverter output)125% overload, delay 1mins protect, 150% overload, imme diate protect
Over Load capacity	110% for 1hr, 125% for 10min, 150% for 1min, More than 150% for 10sec,> 200% shutdown immediately
Inverter efficiency	>94% (100% load)
Bypass	
Rated Voltage	3-Ph, 380/400/415VAC±2% (200/208/220VAC is optional)
Input Voltage range	+/-20% of Nominal Voltage
Rated Frequency	50/60Hz +/-5Hz
Max Bypass current	32Amp
System Parameters	
Transfer time	0mSec (inverter--bypass)
Protection	Output short circuit, overload, overvoltage, under voltage, over temperature etc protection, have audible and visual alarm
Display	LCD display input and output voltage, output current, the inverter voltage, fr equency, output current, battery voltage, PV voltage, PV charging current, t emperature mode, flowcharts, current work status, event record and system information
Operating environment	Temperature 0-40℃
Relative humidity	30%-95%
Work sequence	Solar-Grid-Battery or Solar –battery-Grid, Can choose one of the mode via LCD panel
Operation altitude (max)	<1000 meters (per increase 100 meters power decrease 1%, at most 4000 meters)
Noise Level	<65dB(varies with load and temperature)
IP Rating	IP20 (indoor applications)
Computer communicate interface	RS232/RS485 Standard, SNMP/Wifi/GPRS Modules as optional

Model # APS20K3

Remote control	Inverter Start-up, Shutdown, Abnormal clearance, EPO, Battery self test
Standards	ISO9001:2015, ISO14001:2015, CE/EMS/IEC
Cooling method	force-air cooling
Unit Size W×D×H (unit: mm)	450x840x1100
Shipping Size WxDxH (mm)	560x940x1300
Net /Gross Weight (kg)	223Kgs/245KGs

Operational Modes:

- **PV-Grid-Battery:** Magnizon APS-K3 series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # APS10K3

Magnizon APS10K3 series solar inverter is a three phase10KVA/9KW smart hybrid inverter. These inverters are smart multifunctional intelligent power supply, which consists of built-in MPPT solar controller modules of 1x25KW, charger, rectifier, inverter, static transfer switch, main control circuit and display alarming circuit. User can set different inverter work mode according to users' actual applications.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Banking & commercial applications
- Telecom applications

Key features:

- Pure sine wave output
- Built-in MPPT Solar controller
- Adopt 4 layer PCD and SMD technology
- Can choose the AC charger from front panel
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **High efficiency IGBT inverter technology:** Advanced 6th generation low-exhaust and big power IGBT with excellent high speed switch features, high voltage feature and large current features. Drives by electric voltage, only need small control power. 6th generation with lower saturation voltage, the inverter has high efficiency, low temperature, high reliability
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.
- **High-powered dynamic feature:** Adopt kinds of feedback control such as instantaneous control mode and virtual value, not only reach the high dynamic adjustment, but also reduce the output voltage distortion.

Model # APS10K3

Specifications:

Model	APS10K3
Capacity (KVA)	10KVA
Capacity (KW)	9KW
Grid (AC Input)	
Max input current (A)	15Amp
Type	Three Phase (3P+N+G)
Line-Neutral voltage	220/230/240VAC±25% (100/110/120VAC is optional)
line-line voltage	380/400/4150VAC±25% (200/208/220VAC is optional)
Input frequency	50/60Hz±5%
Charge voltage	407V±1%
Charge current	ON or OFF, Can adjust through panel switch
PV INPUT	
PV Optimum Operating Voltage(Vmp	450VDC~550VDC
PV Max voltage (Voc)	750Vdc
PV Input Nominal DC bus	360V DC
Float charge Voltage	414Vdc +/- 1%
Equilizing charge Voltage	428Vdc =/-1%
MPPT maximum current	60Amp
Maximum PV power	1x25KWp
No of MPPT modules/PV inputs	1nos of 25KW (1+1, 1modules reserved)
Maximum MPPT efficiency	98%
Battery management	
Type	Maintenance free lead-acid battery (other type battery need customize)
Battery voltage	360Vdc (2V battery 180pcs in serial or 12V battery 30pcs in serial)
Battery capacity	According to backup time
Battery low voltage protection	>315V
Battery EOD Settings	1.58Vdc to 1.83Vdc(settable), 1.75Vdc (default)
Staggering DOD Settings	1.85Vdc to 2.1Vdc(settable), 1.89Vdc (default)
Charge Current settings	Factory default 0.15 C10; 0.07 to 0.3 C10 (settable based on connected Battery AH
Battery management	Auto Transfer between equalizing charge and float charge; Auto-Temperature compensation of batteries
AC Rectifier	
AC Input Voltage range	3-Ph, 380/400/415Vac +/- 20%
Rated Frequency	50/60Hz auto detect +/-5Hz

Model # APS10K3

Power factor	0.9
Float charge voltage	410Vdc +/-1%
Equalizing charge voltage	415Vdc +/-1%
Battery charge Current	15Amp
Inverter (Output)	
Inverter output waveform	Pure sine wave, THD<3% (linear load)
Line-Neutral Voltage	220/230/240VAC±2% (100/110/120VAC is optional)
Line-line Voltage	380/400/415VAC±2% (200/208/220VAC is optional)
Frequency	50/60Hz±0.5%
Output current	15Amp
Output voltage precession	+/- 1% of nominal output voltage
Transient voltage Dynamic feature	Inverter output transient dynamic range less than±5%, recovery time <20m S
Crest factor	03:01
THDi	>3%
Overload protection	(Inverter output)125% overload, delay 1mins protect, 150% overload, imme diate protect
Over Load capacity	110% for 1hr, 125% for 10min, 150% for 1min, More than 150% for 10sec,> 200% shutdown immediately
Inverter efficiency	>94% (100% load)
Bypass	
Rated Voltage	3-Ph, 380/400/415VAC±2% (200/208/220VAC is optional)
Input Voltage range	+/-20% of Nominal Voltage
Rated Frequency	50/60Hz +/-5Hz
Max Bypass current	15Amp
System Parameters	
Transfer time	0mSec (inverter--bypass)
Protection	Output short circuit, overload, overvoltage, under voltage, over temperature etc protection, have audible and visual alarm
Display	LCD display input and output voltage, output current, the inverter voltage, fr equency, output current, battery voltage, PV voltage, PV charging current, t emperature mode, flowcharts, current work status, event record and system information
Operating environment	Temperature 0-40℃
Relative humidity	30%-95%
Work sequence	Solar-Grid-Battery or Solar –battery-Grid, Can choose one of the mode via LCD panel
Operation altitude (max)	<1000 meters (per increase 100 meters power decrease 1%, at most 4000 meters)
Noise Level	<65dB(varies with load and temperature)
IP Rating	IP20 (indoor applications)
Computer communicate interface	RS232/RS485 Standard, SNMP/Wifi/GPRS Modules as optional

Model # APS10K3

Remote control	Inverter Start-up, Shutdown, Abnormal clearance, EPO, Battery self test
Standards	ISO9001:2015, ISO14001:2015, CE/EMS/IEC
Cooling method	force-air cooling
Unit Size W×D×H (unit: mm)	450x840x1100
Shipping Size WxDxH (mm)	560x940x1300
Net /Gross Weight (kg)	210Kgs/230KGs

Operational Modes:

- **PV-Grid-Battery:** Magnizon APS-K3 series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # APS120K3

Magnizon APS120K3 series solar inverter is a three phase120KVA/108KW smart hybrid inverter. These inverters are smart multifunctional intelligent power supply, which consists of built-in MPPT solar controller modules of 125KW (5x25KW), charger, rectifier, inverter, static transfer switch, main control circuit and display alarming circuit. User can set different inverter work mode according to users' actual applications.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Banking & commercial applications
- Telecom applications

Model # APS120K3

Key features:

- Pure sine wave output
- Built-in MPPT Solar controller
- Adopt 4 layer PCD and SMD technology
- Can choose the AC charger from front panel
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **High efficiency IGNT inverter technology:** Advanced 6th generation low-exhaust and big power IGBT with excellent high speed switch features, high voltage feature and large current features. Drives by electric voltage, only need small control power. 6th generation with lower saturation voltage, the inverter has high efficiency, low temperature, high reliability
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.
- **High-powered dynamic feature:** Adopt kinds of feedback control such as instantaneous control mode and virtual value, not only reach the high dynamic adjustment, but also reduce the output voltage distortion.

Model # APS120K3

Specifications:

Model	APS120K3
Capacity (KVA)	120KVA
Capacity (KW)	108KW
Grid (AC Input)	
Max input current (A)	185Amp
Type	Three Phase (3P+N+G)
Line-Neutral voltage	220/230/240VAC±25% (100/110/120VAC is optional)
line-line voltage	380/400/4150VAC±25% (200/208/220VAC is optional)
Input frequency	50/60Hz±5%
Charge voltage	407V±1%
Charge current	ON or OFF, Can adjust through panel switch
PV INPUT	
PV Optimum Operating Voltage(Vmp	450VDC~550VDC
PV Max voltage (Voc)	750Vdc
PV Input Nominal DC bus	360V DC
Float charge Voltage	414Vdc +/- 1%
Equilizing charge Voltage	428Vdc =/-1%
MPPT maximum current	360Amp
Maximum PV power	6x25KWp (standard 5x25KWp)
No of MPPT modules/PV inputs	5nos (5x25KWp total capacity of 125KWp), 3x25KW additional as optional
Maximum MPPT efficiency	98%
Battery management	
Type	Maintenance free lead-acid battery (other type battery need customize)
Battery voltage	360Vdc (2V battery 180pcs in serial or 12V battery 30pcs in serial)
Battery capacity	According to backup time
Battery low voltage protection	>315V
Battery EOD Settings	1.58Vdc to 1.83Vdc(settable), 1.75Vdc (default)
Staggering DOD Settings	1.85Vdc to 2.1Vdc(settable), 1.89Vdc (default)
Charge Current settings	Factory default 0.15 C10; 0.07 to 0.3 C10 (settable based on connected Battery AH
Battery management	Auto Transfer between equalizing charge and float charge; Auto-Temperature compensation of batteries
AC Rectifier	
AC Input Voltage range	3-Ph, 380/400/415Vac +/- 20%
Rated Frequency	50/60Hz auto detect +/-5Hz

Model # APS120K3

Power factor	0.9
Float charge voltage	410Vdc +/-1%
Equalizing charge voltage	415Vdc +/-1%
Battery charge Current	240Amp
Inverter (Output)	
Inverter output waveform	Pure sine wave, THD<3% (linear load)
Line-Neutral Voltage	220/230/240VAC±2% (100/110/120VAC is optional)
Line-line Voltage	380/400/415VAC±2% (200/208/220VAC is optional)
Frequency	50/60Hz±0.5%
Output voltage precession	+/- 1% of nominal output voltage
Transient voltage Dynamic feature	Inverter output transient dynamic range less than±5%, recovery time <20m S
Crest factor	03:01
THDi	>3%
Overload protection	(Inverter output)125% overload, delay 1mins protect, 150% overload, imme diate protect
Over Load capacity	110% for 1hr, 125% for 10min, 150% for 1min, More than 150% for 10sec,> 200% shutdown immediately
Inverter efficiency	>94% (100% load)
Bypass	
Rated Voltage	3-Ph, 380/400/415VAC±2% (200/208/220VAC is optional)
Input Voltage range	+/-20% of Nominal Voltage
Rated Frequency	50/60Hz +/-5Hz
Max Bypass current	272Amp
System Parameters	
Transfer time	0mSec (inverter--bypass)
Protection	Output short circuit, overload, overvoltage, under voltage, over temperature etc protection, have audible and visual alarm
Display	LCD display input and output voltage, output current, the inverter voltage, fr equency, output current, battery voltage, PV voltage, PV charging current, t emperature mode, flowcharts, current work status, event record and system information
Operating environment	Temperature 0-40℃
Relative humidity	30%-95%
Work sequence	Solar-Grid-Battery or Solar –battery-Grid, Can choose one of the mode via LCD panel
Operation altitude (max)	<1000 meters (per increase 100 meters power decrease 1%, at most 4000 meters)
Noise Level	<65dB(varies with load and temperature)
IP Rating	IP20 (indoor applications)
Computer communicate interface	RS232/RS485 Standard, SNMP/Wifi/GPRS Modules as optional
Remote control	Inverter Start-up, Shutdown, Abnormal clearance, EPO, Battery self test

Model # APS120K3

Standards	ISO9001:2015, ISO14001:2015, CE/EMS/IEC
Cooling method	force-air cooling
Unit Size W×D×H (unit: mm)	960*800*1700
Shipping Size WxDxH (mm)	1060*900*1900
Weight (kg)	860Kgs

Operational Modes:

- **PV-Grid-Battery:** Magnizon APS-K3 series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.

Model # APS10-60K3

Magnizon APS-K3 series solar inverter is a three phase inverter, range from 10KVA to 60KVA. These inverters are smart multifunctional intelligent power supply, which consists of built-in MPPT solar controller, charger, rectifier, inverter, static transfer switch, main control circuit and display alarming circuit. User can set different inverter work mode according to users' actual applications.

Applications:

- Solar power stations
- Home solar power systems
- Industrial Solar power storage
- DC wind turbine stations
- Banking & commercial applications
- Telecom applications

Model # APS10-60K3

Key features:

- Pure sine wave output
- Built-in MPPT Solar controller
- Adopt 4 layer PCD and SMD technology
- Can choose the AC charger from front panel
- **With Two charging mode:** AC charging mode and solar charging mode, solar charging priority
- **Can Choose Two work mode:** Solar-Grid-Battery, Solar-Battery-Grid, can choose from LCD display
- **High efficiency IGNT inverter technology:** Advanced 6th generation low-exhaust and big power IGBT with excellent high speed switch features, high voltage feature and large current features. Drives by electric voltage, only need small control power. 6th generation with lower saturation voltage, the inverter has high efficiency, low temperature, high reliability
- **Intelligent detecting function:** This system microprocessor can continually on-line detect power status, breaker status and all the working status of the circuit.
- **Excellent load feature:** It is completely capable to load from 0-100% while no need to change to bypass, which make sure the output reliable.
- **Intelligent communication-URL based remote monitoring and operation:** With RS232 and RS485 standard collocation, optional SNMP and dry contact
- **Perfect protection:** Input/output over/low voltage protection, input surge protection, phase sequence protection, battery over charge/discharge protection, short circuit protection, over-temperature protection and so on, as well as alarm function.
- **Selectable battery inspection module:** Can test the single parameter and display on the LCD, battery failure will immediately alarm and inform the administrator.
- **High-powered dynamic feature:** Adopt kinds of feedback control such as instantaneous control mode and virtual value, not only reach the high dynamic adjustment, but also reduce the output voltage distortion.

Model # APS10-60K3

Specifications:

Model	APS10K3	APS20K3	APS30K3	APS40K3	APS50K3	APS60K3
Capacity (KVA)	10 kVA	20 kVA	30 kVA	40 kVA	50 kVA	60 kVA
Power (Watts)	8 kW	16 kW	24 kW	32 kW	40 kW	48 kW
Grid (AC Input)						
Max input current (A)	31	41	61	81	101	121
Type	Three Phase (3P+N+G)					
Line-Neutral voltage	220/230/240VAC±25% (100/110/120VAC is optional)					
line-line voltage	380/400/4150VAC±25% (200/208/220VAC is optional)					
Input frequency	50/60Hz±5%					
Charge voltage	407V±1%					
Charge current	ON or OFF, Can adjust through panel switch					
PV						
PV1	300VDC~600VDC (15pcs 24vdc solar panel in series, then through combiner box parallel)					
PV2	300VDC~600VDC (single group 15pcs 24vdc solar panel in series, or through combiner 2 pcs in parallel)					
Charge current	20A (max), need more, can add external 20A charge module					
Battery						
Type	Maintenance free lead-acid battery (other type battery need customize)					
Battery voltage	360Vdc (2V battery 180pcs in serial or 12V battery 30pcs in serial)					
Battery capacity	According to backup time					
Battery low voltage protection	>315V					
Inverter (Output)						
Inverter output waveform	Pure sine wave, THD<3% (linear load)					
Line-Neutral Voltage	220/230/240VAC±2% (100/110/120VAC is optional)					
Line-line Voltage	380/400/415VAC±2% (200/208/220VAC is optional)					
Frequency	50/60Hz±0.5%					
Dynamic feature	Inverter output transient dynamic range less than±5%, recovery time <20mS					
Crest factor	03:01					
Overload protection	(Inverter output)125% overload, delay 1mins protect, 150% overload, immediate protect					
Inverter efficiency	>90% (100% load)					
System Parameters						
Transfer time	<0.5ms (inverter--bypass)					
Protection	Output short circuit, overload, overvoltage, under voltage, over temperature etc protection, have audible and visual alarm					
Display	LCD display input and output voltage, output current, the inverter voltage, frequency, output current, battery voltage, PV voltage, PV charging current, temperature mode, flowcharts, current work status, event record and system information					

Model # APS10-60K3

Operating environment	Temperature 0-40℃					
Relative humidity	30%-95%					
Work sequence	Solar-Grid-Battery or Solar –battery-Grid, Can choose one of the mode via LCD panel					
Operation altitude (max)	<1000 meters (per increase 100 meters power decrease 1%, at most 4000 meters)					
Computer communicate i nterface	RS232/RS485					
Standards	ISO9001:2015, ISO14001:2015, CE/EMS/IEC					
Cooling method	force-air cooling					
Size W×D×H (unit: mm)	600*620*1250			700*620*1530		
Weight (kg)	236	265	342	407	485	506

Operational Modes:

- **PV-Grid-Battery:** Magnizon APS-K3 series solar inverter is designed for real-time load sharing function between solar & utility. Solar power priority mode, PV power supply power to inverter via built-in MPPT controller and then the output will be pure sine wave AC power to support load via inverter meanwhile MPPT controller will also charges battery. When solar power is not enough, then utility power will support power to load. If there is no grid power available, then it will uses the battery. In this way, we can maximum use solar power and utility power, hence reduce battery discharge time and extend battery lifespan.
- **PV-Battery-Grid (Maximum use of solar power under the stable environment of utility power):** Solar power supply power to inverter via MPPT controller and then output pure sine wave AC power to load via inverter, meanwhile charge battery. When the solar power is not enough, to maximum use solar power, the battery will supply power to load. When the battery is discharged t a value, the utility power will supply power to load. The users can maximum use solar power, reduce grid power supply and save electricity.