MAGNIZON
GREEN ENERGY

www.magnizon.com

SOLAR PANELS

Affordable Solar Power for Generations

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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

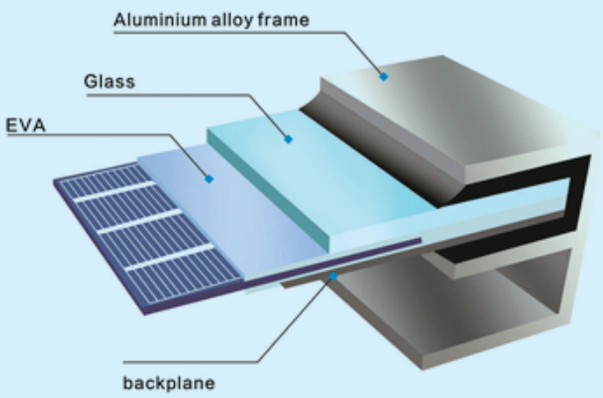
Production process using World class auxiliary materials

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.

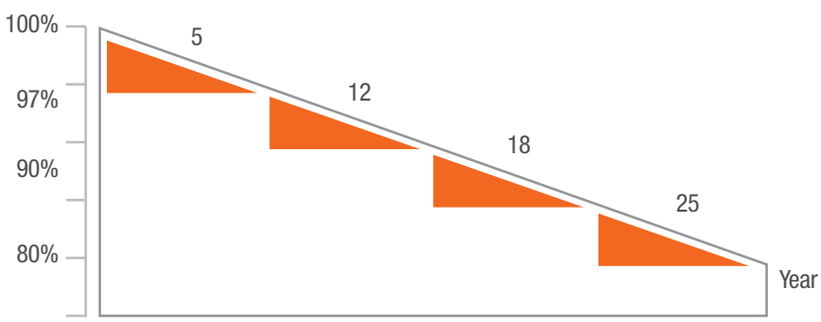
- When packaging, all our solar modules and cells are classified and sorted according to their current characteristics and all the packages are special designed that enable our products to be free of dampness, rust, moisture, erosion and shock.
- Our products are also independently tested by global renowned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

ENVIRONMENTAL ADAPTABILITY TEST

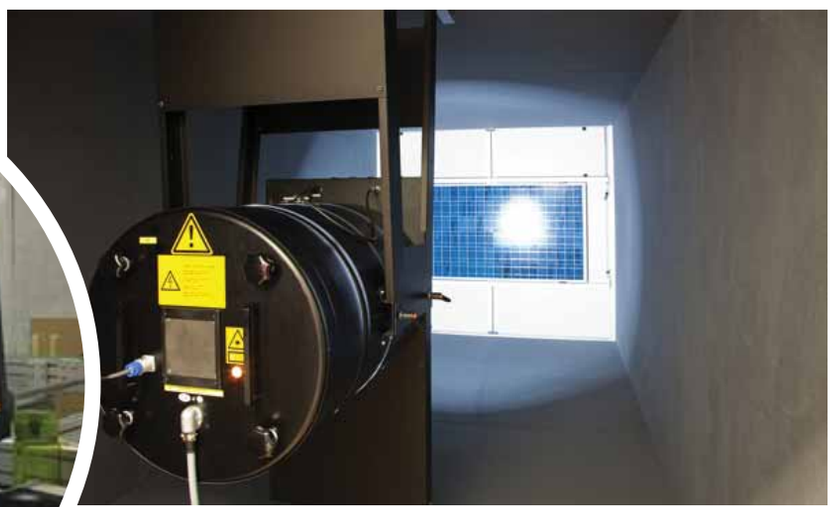
- Ammonia resistance test, resistance to salt spray test, So2 resistance test, resistance to dust test
- Adaptation to environment test: Dry and hot weather testing, hot and humid climate test, cold weather testing

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

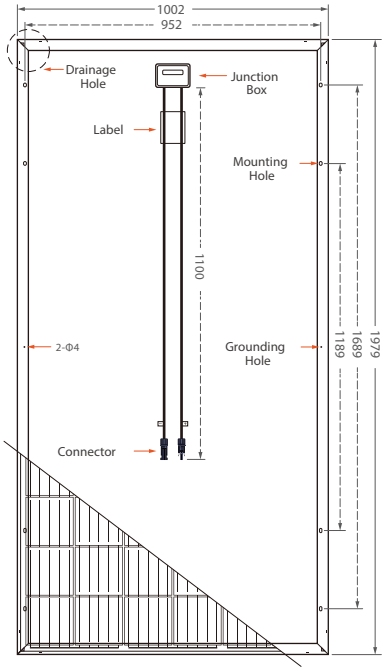
15 Years Material & Workmanship Guarantee

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

MSM72X9-380 5BB

380W

PERC Monocrystalline PV Module



RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Perc Mono 158.75 x 158.75
No.of Cells and connections	72(6x12)
Dimensions(mm)(L*W*H)	1979x1002x35(mm)
Weight(kg)	21.6Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Cable	NA but customization acceptable
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	380W
Power Tolerance	0 - +5W
Cell Efficiency	19.16%
Open Circuit Voltage(Voc)	49.0V
Maximum Power Voltage(Vmp)	40.5V

Short Circuit(Isc)	9.76A
Maximum Power Current(Imp)	9.39A
Temperature Coefficient of isc	0.048% °C
Temperature Coefficient of Voc	-0.28%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

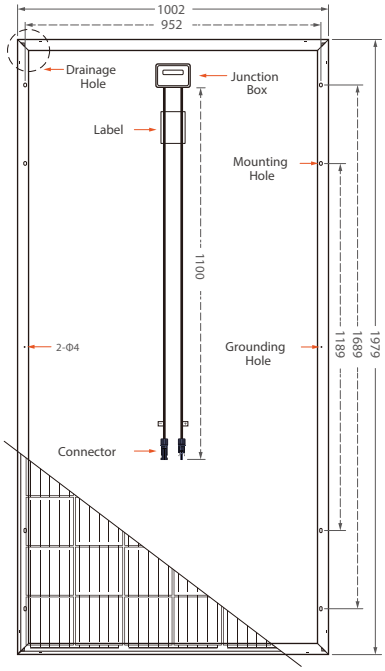
PERFORMANCE PARAMETERS

Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	16 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

MSM72X9-385 5BB

385W

PERC Monocrystalline PV Module



ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	290W
Open circuit voltage (Voc)	47.7V
Max. Power Voltage (Vmp)	38.8V
Short Circuit Current (Isc)	7.95A
Max. Power Current (imp)	7.48A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Perc Mono 158.75 x 158.75
No.of Cells and connections	72(6x12)
Dimensions(mm)(L*W*H)	1979x1002x35(mm)
Weight(kg)	21.6Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Cable	NA but customization acceptable
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	385W
Power Tolerance	0 - +5W
Cell Efficiency	19.42%
Open Circuit Voltage(Voc)	49.2V
Maximum Power Voltage(Vmp)	40.8V

Short Circuit(Isc)	9.89A
Maximum Power Current(Imp)	9.44A
Temperature Coefficient of isc	0.048% °C
Temperature Coefficient of Voc	-0.28%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25°C, Spectrum AM1.5

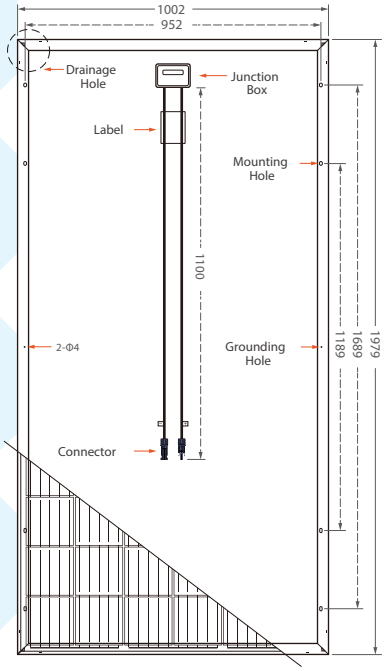
PERFORMANCE PARAMETERS

Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85°C
Maximum Series Fuse	16 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2°C

MSM72X9-390 5BB

390W

PERC Monocrystalline PV Module



ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	294W
Open circuit voltage (Voc)	48.0V
Max. Power Voltage (Vmp)	39.1V
Short Circuit Current (Isc)	8.02A
Max. Power Current (imp)	7.54A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Perc Mono 158.75 x 158.75
No.of Cells and connections	72(6x12)
Dimensions(mm)(L*W*H)	1979x1002x35(mm)
Weight(kg)	21.6Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Cable	NA but customization acceptable
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	390W
Power Tolerance	0 - +5W
Cell Efficiency	19.67%
Open Circuit Voltage(Voc)	49.4V
Maximum Power Voltage(Vmp)	41.0V

Short Circuit(Isc)	9.98A
Maximum Power Current(Imp)	9.52A
Temperature Coefficient of isc	0.048% °C
Temperature Coefficient of Voc	-0.28%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

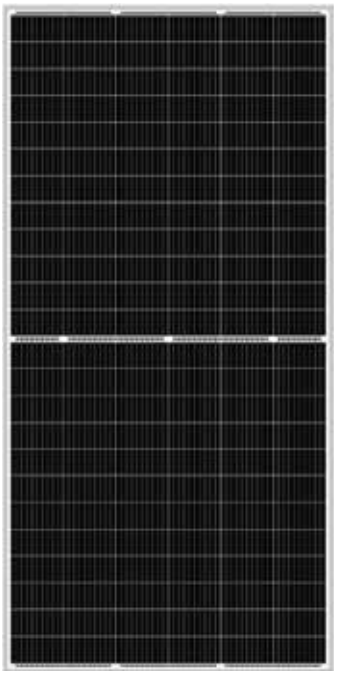
PERFORMANCE PARAMETERS

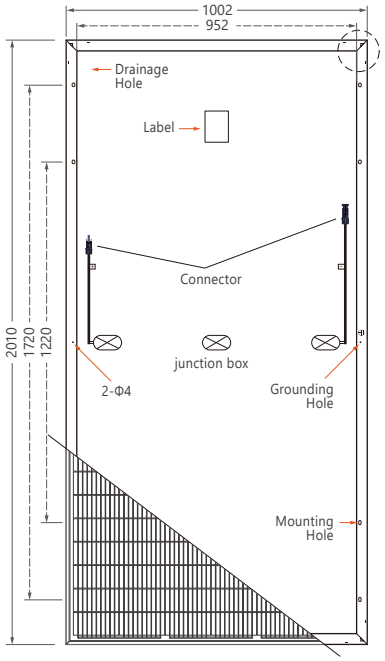
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	16 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

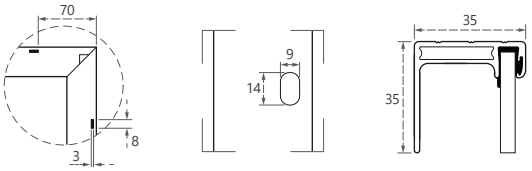
MSM72X9-400 9BB

400W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	302W
Open circuit voltage (Voc)	47.3V
Max. Power Voltage (Vmp)	39.6V
Short Circuit Current (Isc)	8.19A
Max. Power Current (imp)	7.63A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	144(6x24)
Dimensions(mm)(L*W*H)	2010x1002x35(mm)
Weight(kg)	23Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet
Cable	4.0mm^2 Portrait N400m/ P300mm Landscape N1400mm/ P1400mm

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	400W
Power Tolerance	0 - +5W
Cell Efficiency	19.87%
Open Circuit Voltage(Voc)	49.0V
Maximum Power Voltage(Vmp)	40.6V

Short Circuit(Isc)	10.32A
Maximum Power Current(Imp)	9.86A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25°C, Spectrum AM1.5

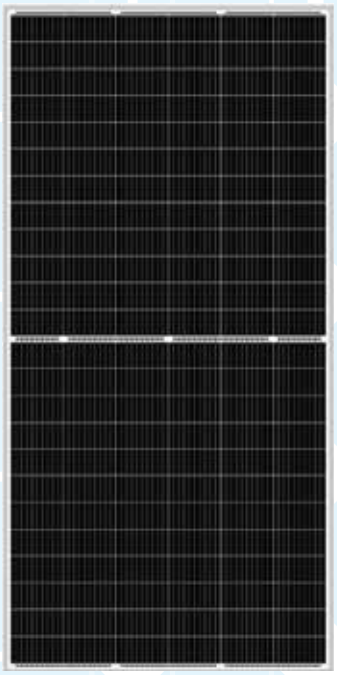
PERFORMANCE PARAMETERS

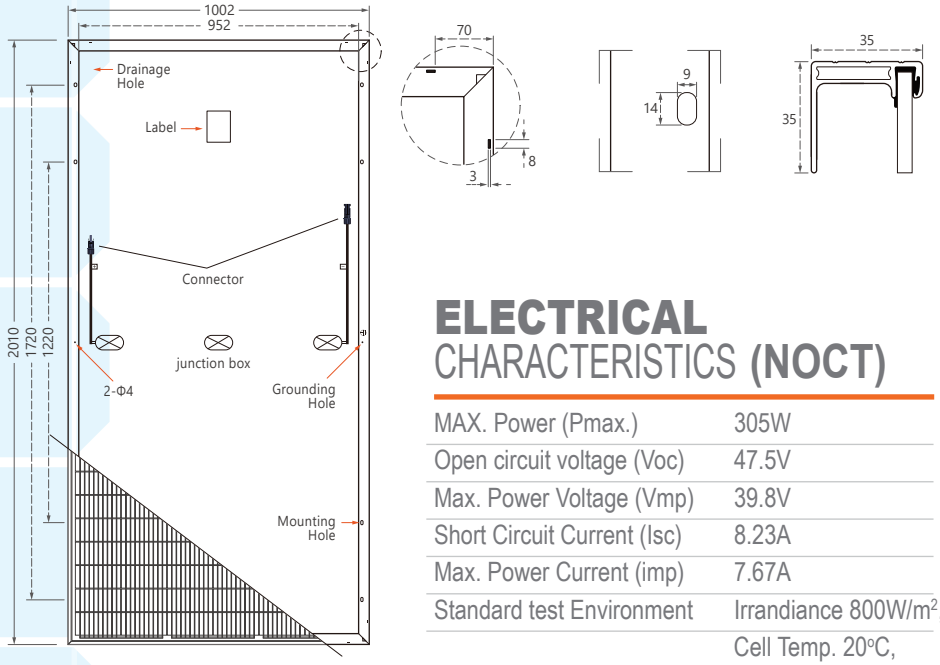
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85°C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2°C

MSM72X9-405 9BB

405W

Monocrystalline PV Module





ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	305W
Open circuit voltage (Voc)	47.5V
Max. Power Voltage (Vmp)	39.8V
Short Circuit Current (Isc)	8.23A
Max. Power Current (imp)	7.67A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	144(6x24)
Dimensions(mm)(L*W*H)	2010x1002x35(mm)
Weight(kg)	23Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet
Cable	4.0mm^2 Portrait N400m/ P300mm Landscape N1400mm/ P1400mm

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	405W
Power Tolerance	0 - +5W
Cell Efficiency	20.12%
Open Circuit Voltage(Voc)	49.2V
Maximum Power Voltage(Vmp)	40.8V

Short Circuit(Isc)	10.35A
Maximum Power Current(Imp)	9.93A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

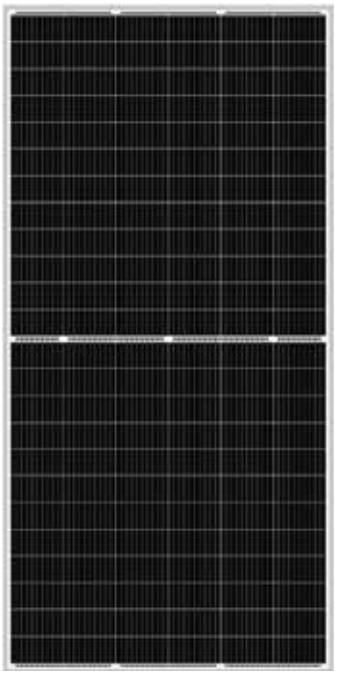
PERFORMANCE PARAMETERS

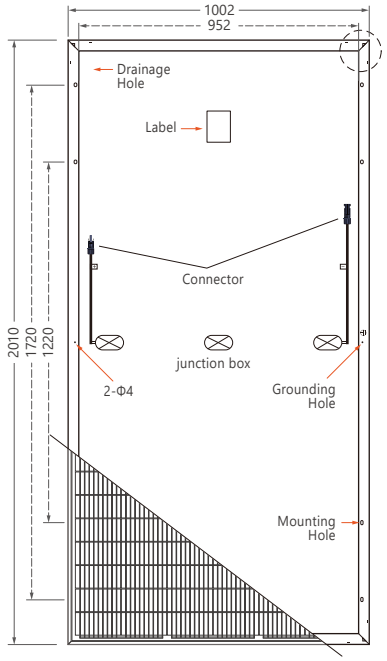
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

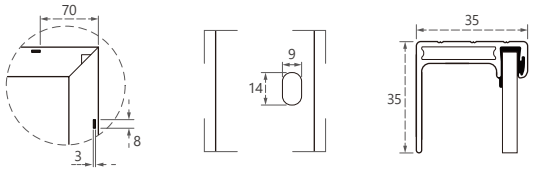
MSM72X9-410 9BB

410W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	309W
Open circuit voltage (Voc)	47.7V
Max. Power Voltage (Vmp)	40.1V
Short Circuit Current (Isc)	8.27A
Max. Power Current (imp)	7.71A
Standard test Environment	Irrandiance 800W/m², Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	144(6x24)
Dimensions(mm)(L*W*H)	2010x1002x35(mm)
Weight(kg)	23Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet
Cable	4.0mm² Portrait N400m/ P300mm Landscape N1400mm/ P1400mm

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	410W
Power Tolerance	0 - +5W
Cell Efficiency	20.37%
Open Circuit Voltage(Voc)	49.4V
Maximum Power Voltage(Vmp)	40.0V

Short Circuit(Isc)	10.40A
Maximum Power Current(Imp)	10.00A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m², cell temp.25° C, Spectrum AM1.5

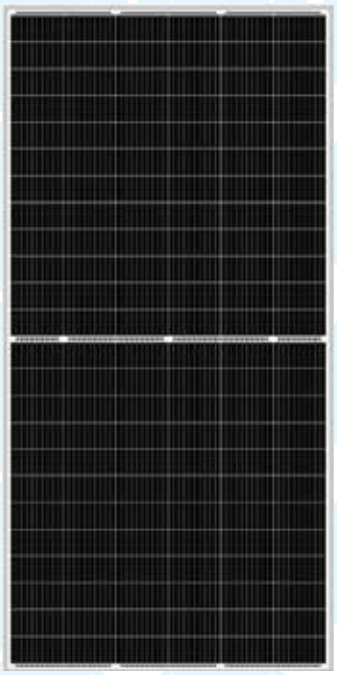
PERFORMANCE PARAMETERS

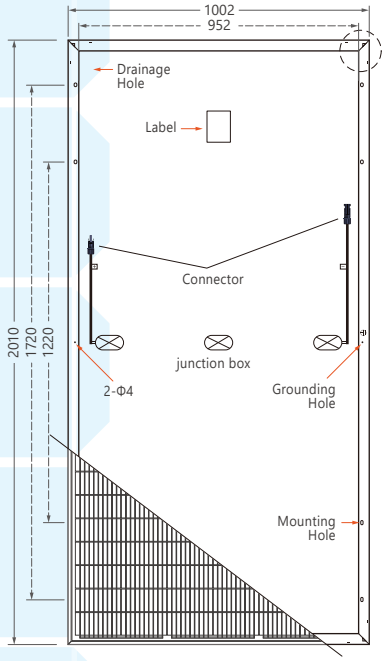
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

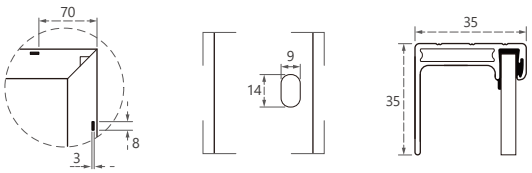
MSM72X9-415 9BB

415W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	313W
Open circuit voltage (Voc)	47.9V
Max. Power Voltage (Vmp)	40.3V
Short Circuit Current (Isc)	8.31A
Max. Power Current (imp)	7.77A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	144(6x24)
Dimensions(mm)(L*W*H)	2010x1002x35(mm)
Weight(kg)	23Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	30pcs./ pallet
Cable	4.0mm^2 Portrait N400m/ P300mm Landscape N1400mm/ P1400mm

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	415W
Power Tolerance	0 - +5W
Cell Efficiency	20.63%
Open Circuit Voltage(Voc)	49.6V
Maximum Power Voltage(Vmp)	41.2V

Short Circuit(Isc)	10.43A
Maximum Power Current(Imp)	10.08A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

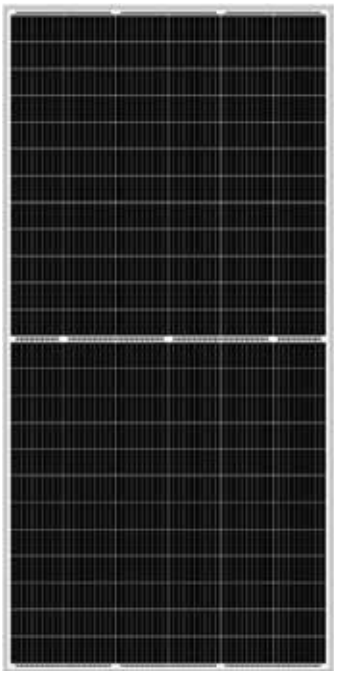
PERFORMANCE PARAMETERS

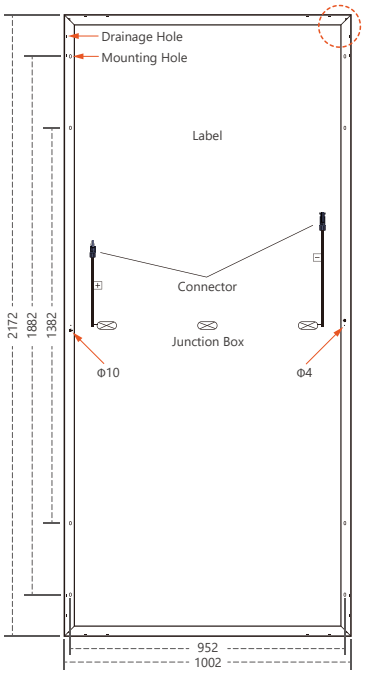
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

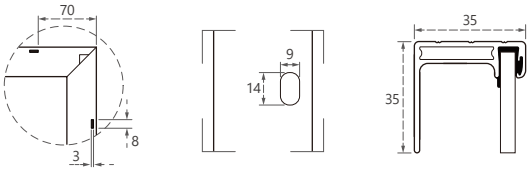
MSM72X9-435 9BB

435W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	328W
Open circuit voltage (Voc)	51.2V
Max. Power Voltage (Vmp)	42.9V
Short Circuit Current (Isc)	8.21A
Max. Power Current (imp)	7.65A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	156(6x26)
Dimensions(mm)(L*W*H)	2172x1002x40(mm)
Weight(kg)	24.8Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	27pcs./ pallet
Cable	4.0mm^2 Portrait N400m/ P300mm (Cable length can be customized)

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	435W
Power Tolerance	0 - +5W
Cell Efficiency	19.99%
Open Circuit Voltage(Voc)	53.7V
Maximum Power Voltage(Vmp)	45.3V

Short Circuit(Isc)	10.19A
Maximum Power Current(Imp)	9.61A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

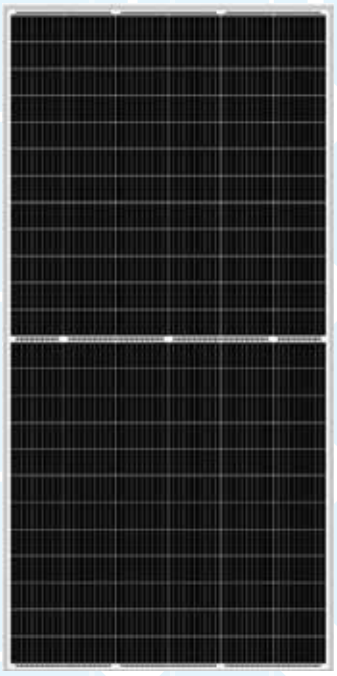
PERFORMANCE PARAMETERS

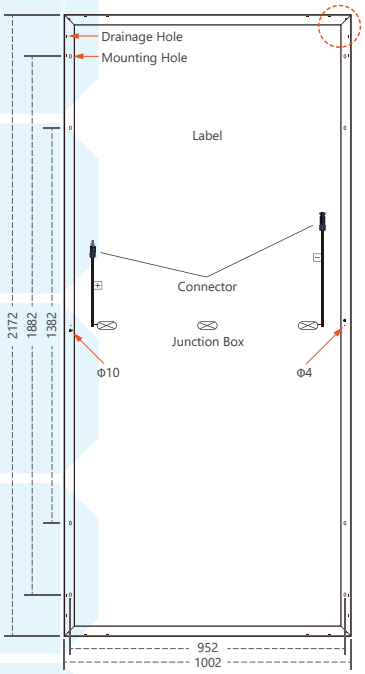
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

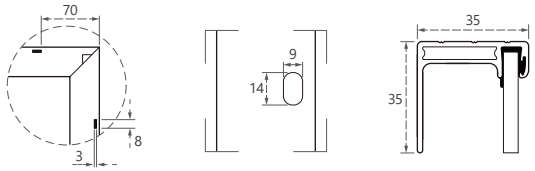
MSM72X9-440 9BB

440W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	332W
Open circuit voltage (Voc)	51.4V
Max. Power Voltage (Vmp)	43.1V
Short Circuit Current (Isc)	8.24A
Max. Power Current (imp)	7.70A
Standard test Environment	Irrandiance 800W/m², Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	156(6x26)
Dimensions(mm)(L*W*H)	2172x1002x40(mm)
Weight(kg)	24.8Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	27pcs./ pallet
Cable	4.0mm² Portrait N400m/ P300mm (Cable length can be customized)

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	440W
Power Tolerance	0 - +5W
Cell Efficiency	20.22%
Open Circuit Voltage(Voc)	53.9V
Maximum Power Voltage(Vmp)	45.6V

Short Circuit(Isc)	10.25A
Maximum Power Current(Imp)	9.65A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m², cell temp.25° C, Spectrum AM1.5

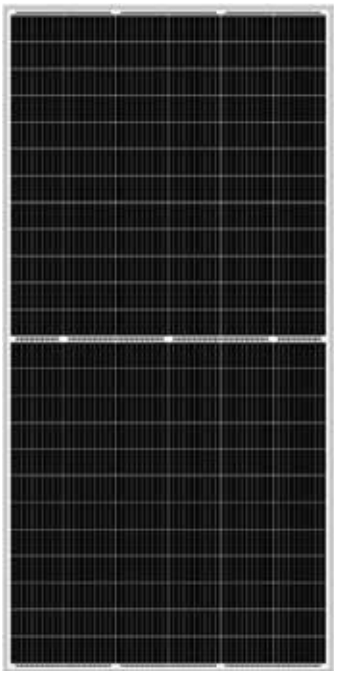
PERFORMANCE PARAMETERS

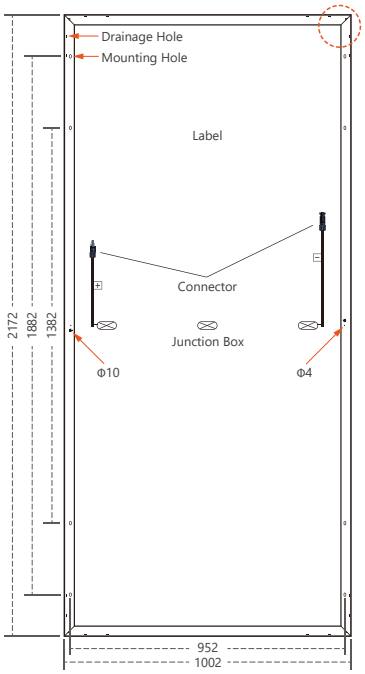
Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

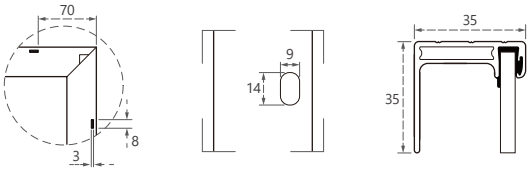
MSM72X9-445 9BB

445W

Monocrystalline PV Module







ELECTRICAL CHARACTERISTICS (NOCT)

MAX. Power (Pmax.)	336W
Open circuit voltage (Voc)	51.6V
Max. Power Voltage (Vmp)	43.3V
Short Circuit Current (Isc)	8.29A
Max. Power Current (imp)	7.76A
Standard test Environment	Irrandiance 800W/m^2, Cell Temp. 20°C, Spectrum AM1.5, Wind Speed 1m/s

RAW MATERIALS AND MECHANICAL PARAMETERS

Type of Cells(mm)	Mono 158.75 x 79.375mm
No.of Cells and connections	156(6x26)
Dimensions(mm)(L*W*H)	2172x1002x40(mm)
Weight(kg)	24.8Kg
Glass	3.2mm High transmission & Anti reflection coating

Backsheet	Multilayer Composite
Aluminium -Frame	Silvery/ Black Anodized alluminium aloy
Junction-Box	IP68, 3 Bypass diodes
Connector	QC4/ MC4 compactable
Package Configuration	27pcs./ pallet
Cable	4.0mm^2 Portrait N400m/ P300mm (Cable length can be customized)

ELECTRICAL PARAMETERS (STANDARD TEST CONDITION)

Rated Maximum Power(Mp)	445W
Power Tolerance	0 - +5W
Cell Efficiency	20.45%
Open Circuit Voltage(Voc)	54.2V
Maximum Power Voltage(Vmp)	45.8V

Short Circuit(Isc)	10.29A
Maximum Power Current(Imp)	9.72A
Temperature Coefficient of isc	0.005%/ °C
Temperature Coefficient of Voc	-0.29%/ °C
Temperature Coefficient of Pmax	-0.37%/ °C
Standard test environment	Irradiance 1000W/m^2, cell temp.25° C, Spectrum AM1.5

PERFORMANCE PARAMETERS

Maximum System Voltage	1000V/ 1500V DC
Operating Temperature	-40 - +85° C
Maximum Series Fuse	20 A
Maximum Static Load, Front Side (e.x.Snow)	5400 PA
Maximum Static Load, Back Side(e.x.Wind)	2400 PA
Application Grade	Class A
Normal operating Cell Temperature	45 °C +/- 2° C

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.

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