



MXPOWER

**HARNESS
THE POWER
OF SUN
FOR A
BRIGHTER
FUTURE**



Harness the potential
of the sun,
unleash its power
for the world



SPREADING THE LIGHT AND JOY OF SUSTAINABLE LIVING

For us, Sun is not just a source of light, but an eternal resource of sustainable living. Our life revolves around it, literally and surreally. And over the years, technology has derived myriad ways to tap and store energy offered for free by the Sun.

MxPower Solar aspires to bring innovation in manufacturing to attain excellence in providing green solutions driven by the power of Sun.

Exploring the source of our existence.

Established in 2001, MxPower Solar believes in delivering an unsurpassed service experience to their customers who love nature. **We design and manufacture solar photovoltaic modules and design, install and commission grid/off-grid solar rooftop power plants.** Additionally, we brighten your life by designing, manufacturing and installing solar LED street lights, home lights etc. Be it corporate, government, commercial establishments or residences.

Our products last over years and help you save electricity bills and natural resources as well!

Our Proud Certifications:



FOR US,
SOLAR POWER
IS THE NEED
OF THE HOUR

Here are a few reasons why you should
choose MX Power Solar for wellness of all.



1. **Manufacturing setup:** We have an in-house facility to manufacture the Solar Photovoltaic Module and other LED Solar Products.



2. **MNRE Partnership:** We have partnered with Ministry of New and renewable Energy (MNRE) to spread the cause of solar power and sustainable energy resources.



3. **Reliable team:** Our dedicated team with consolidated experience of more than 50 years is capable of handling large solar projects.



4. **Excellent service:** We are committed to offer world-class service that surpasses your expectations with:

- Easy accessibility
- Individual and personalized attention
- A unique system for service with complete process flow
- Convenient and prompt service



5. **Technical credibility:** Our team of technical experts has hands-on experience about the technical aspects and can find innovative ways to offer green solutions with solar power.



6. **Trusted name:** We are one of the few firms to have the experience of establishing multiple plants above 100KW in Maharashtra alone.



7. **Affordable cost:** We innovate at every step to make our products most affordable to maximum number of people.



8. **Environmentally conscious firm:** We are very ethical and quality conscious organization that promotes renewable sources of energy.



9. **A range of offerings:** MX Power Solar addresses the specific needs of corporate, government, commercial establishments and residences.



Panel Manufacturing Setup



Module Testing with Sun Simulator



Cell Testing

Solar Photovoltaic Modules:

Making the most of the bright energy

We produce high-efficiency mono and polycrystalline silicon photovoltaic modules in our production facility at Pune, India. With our state-of-the-art manufacturing equipment from leading suppliers, robust in-house processes and systems to drive manufacturing

excellence and a global supply chain and sales and distribution network, we are the preferred choice for products and services with 'Made in India' brand at a global scale.

We prefer to use our own modules for the solar plants that we execute as we believe that we sell the power and not just the modules. We assure that the quality of material used in the modules ensures best performance with minimum degradation over the years and also ensures faster payback with enhanced monetary benefits.



HIGHER OUTPUT OF MODULE POWER by reducing cell to module power loss



Up to + 2.5 Wp POSITIVE POWER OUTPUT TOLERANCE GUARANTEED ensuring better ROI



EXCELLENT LOW LIGHT RESPONSE



Designed for very HIGH AREA EFFICIENCY ideally suited for roof-top and ground-mounted applications



Extremely RELIABLE PRODUCT suiting all environment conditions



Extremely NARROW POWER BINNING TOLERANCE to reduce current mismatch loss in single string



Quality And Safety

- 25 years of linear power output warranty Certified with IEC 61215, IEC 61730-I & IEC 61730-II by TUV
- Rigorous quality control meeting the highest international standards
- Certifide for salt mist corrosion resistance - severity IV



Applications

- On-grid large scale utility systems
- Off-grid residential systems
- Solar pumping applications
- On-grid rooftop residential, Commercial and Industrial rooftop applications

Some of our key projects



100kw Lupin, Aurangabad



30kw asbestos rooftop at Udupi



30Kw sheet metal at Pune



30Kw elevated power plant in Pune



10kw natural inclination

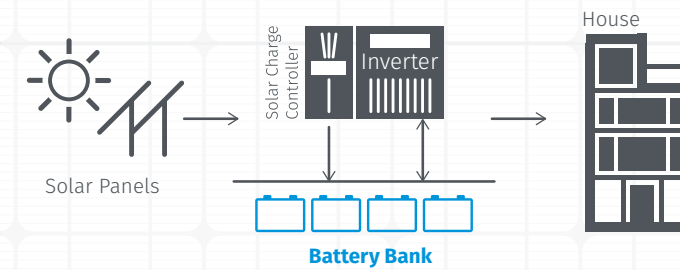
Operation and Maintenance:

- To ensure the optimum power generation through the solar power plant installed by our customer which has a life of 20-25 yrs.
- We also provide the Operation & Maintenance to these plants at very reasonable cost which is not more than 2% of the plant cost
- Operation & Maintenance covers the breakdown calls, preventive maintenance calls & cleaning of the solar panels through our efficient service ERP system

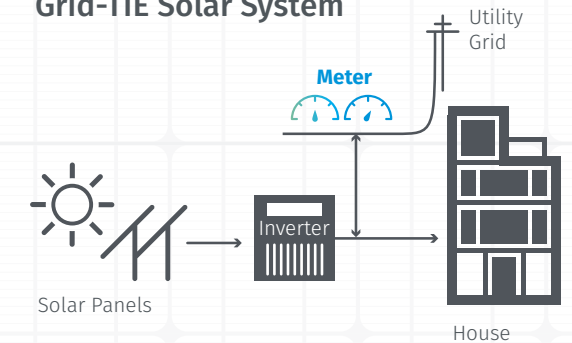
EPC: A Hassle-free & Complete Service Offering

EPC is a combination of multiple services that simplify your life to the core. Comprising of Engineering, Procurement and Construction, the end-to-end service brings best quality products to you without any stress.

Off-Grid Solar System



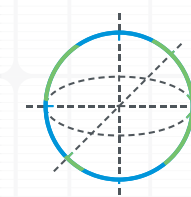
Grid-TIE Solar System



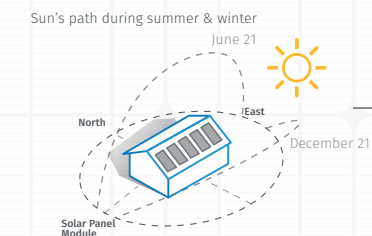
Engineering:

Identification of site for solar installation

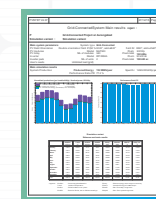
The first phase includes the detailed analysis of the site like:



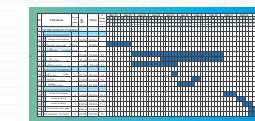
Log in latitude & longitude of the site and understand orientation of solar panels



Perform Shadow analysis



Perform PVSyst analysis to understand monthly Solar generation



Prepare GANTT chart for the project

Procurement:

We Procure the best quality material worldwide. We Manufacture the Solar modules and ensure that other bought in items like invertors, AC/DC protections devices, cables are procured from the worlds best top ten suppliers.

Construction:

Our experienced team constructs the solar plant as per schedule of the GANTT chart, which ensures the timely completion of the project to begin power generation in time and save costs.

Conventional Solar on Roof



Solar Embedded roof



Actual Solar Embedded Roof



TECHNICAL DATA
Embedded Solar roof

This datasheet is applicable for:
MxP12150/ MxP60c250

Electrical Data		
Rated Power (Wp)	150	250
Maximum Voltage (Vmp)	18.2	31.01
Maximum Current (Imp)	8.34	8.1
Open Circuit Voltage (VoC)	22.5	37.95
Short Circuit Voltage (Isc)	8.67	8.51
Module Efficiency (%)	7.30%	9.20%

Temperature Coefficients		
Tc of Open Circuit Voltage	-0.45%/C	-0.45%/C
Tc of Short Circuit Current	-0.35%/C	-0.35%/C
Tc of Power	-0.41%/C	-0.41%/C
Maximum System Voltage	1000V	1000V
NOCT	-0.45%/C	-0.45%/C
Temperature Range	-40C to + 85C	-40C to + 85C

Mechanical Data		
Length x Width x Height	2000 x 1030 x 45	2000 x 1335 x 45
Module Weight (Kg)	12	27
Application Class	Class A	
Protection Class	Class II	
Superstrate	High transmission low iron tempered glass	
Cells	36	60
Cell Encapsulant	EVA	
Back Sheet	Composite Film	
Frame	MS sheet with PP powder coating 1mm thick with required bends to make it compatible to conventional metal roof sheets	
Mechanical Load Test	5400 Pa	
Maximum Series Fuse Rating	15 A	

SOLAR PRODUCTS: Solar Power To Brighten Everyday Of Your Life.



MxPower Solar manufactures a wide range of solar products to utilize the power of Sun to maximum capacity. From home lights, street lights, LED lanterns, pumps to luminaires, we offer you an opportunity to choose sustainable sources of energy for your daily needs and simplify your life in every way possible!

Solar Home Light:

- Solid-state with high shock/vibration resistant
- Maintenance free, easy installation
- Long lifetime 50,000+ hrs (5+ years)
- Low power consumption with high intensity
- Bus, shuttle, railcar passenger interiors
- Focused reading and task lighting
- Can be used for Interior design, retail store displays, closet illumination, cove lighting



Solar LED Lantern:

- High power Osram LED
- ISO Certified
- Zero Maintenance cost
- MNRE/MEDA approved

Specifications

General					
Model	MXLCS3	MXLBS3	MXLBS5	MXLBB5	MXLBB10
Type	Cone	Barrel	Barrel	Barrel	Barrel
Daily backup/ Autonomy	3Hrs./ 3days	3Hrs./ 3days	5Hrs./ 3days	4Hrs./ 4days	8Hrs./ 3days
Light output at 1 Ft.	65 lumens	90 lumens	90 lumens	169 lumens	169 lumens
Light output at 5 Ft.	2 lumens	8 lumens	8 lumens	14 lumens	14 lumens
Configuration					
PV Module	6V 3Wp	6V 3Wp	6V 5Wp	12V 5Wp	12V 10Wp
Battery	6V 4.5Ah	6V 4.5Ah	6V 4.5Ah	12V 7Ah	12V 7Ah
No. of LED's	3	6	6	9	9
Electrical					
LED Driver	Separate LED Driver IC with the efficiency of >95%				
Solar Charge controller	Efficient charge controller			Microcontroller based	
Solar Charging				Takes place even when switch is OFF	
Display / Indications	Battery low & Charging			Battery Status & Charging	
Protections	Battery deep discharging, Battery overcharging, Short Circuit				
Mobile Charging Option	No	No	Yes	No	Yes
Shipping info					
Gross Weight	1.2 Kg	1.2 Kg	1.2 Kg	3.2 Kg	3.2 Kg



Solar Street Lights:

- Microcontroller based solar charge controller
- Protections: Battery reversal, PV panel reversal, no load, overload, battery deep discharge & battery overcharge

Specifications:

General				
Model	MXSL07	MXSL10	MXSL18	MXSL24
Configuration				
Luminaire	7.2W	10W	18W	24W
Light output	900 Lumens	1100 Lumens	1900 Lumens	2600 Lumens
PV Module	12V 37Wp	12V 40Wp	12V 74Wp	12V 100Wp
Battery	12V 26Ah(SMF)	12V 40Ah	12V 50Ah	12V 75Ah
Battery Box	Acid proof, Flame proof PP container		MS box with powder coating	
Solar Charge Controller	5 Amp max, inside the luminaire		10Amp Max, Inside the Battery Box	
Erection Pole	78mm dia 4.5 mtr. Length M.S. Pole (Galvanised/ PU Coated)			
Electrical				
Life of LED's	>50,000 Hrs			
Protection	Battery deep discharge and reverse polarity			



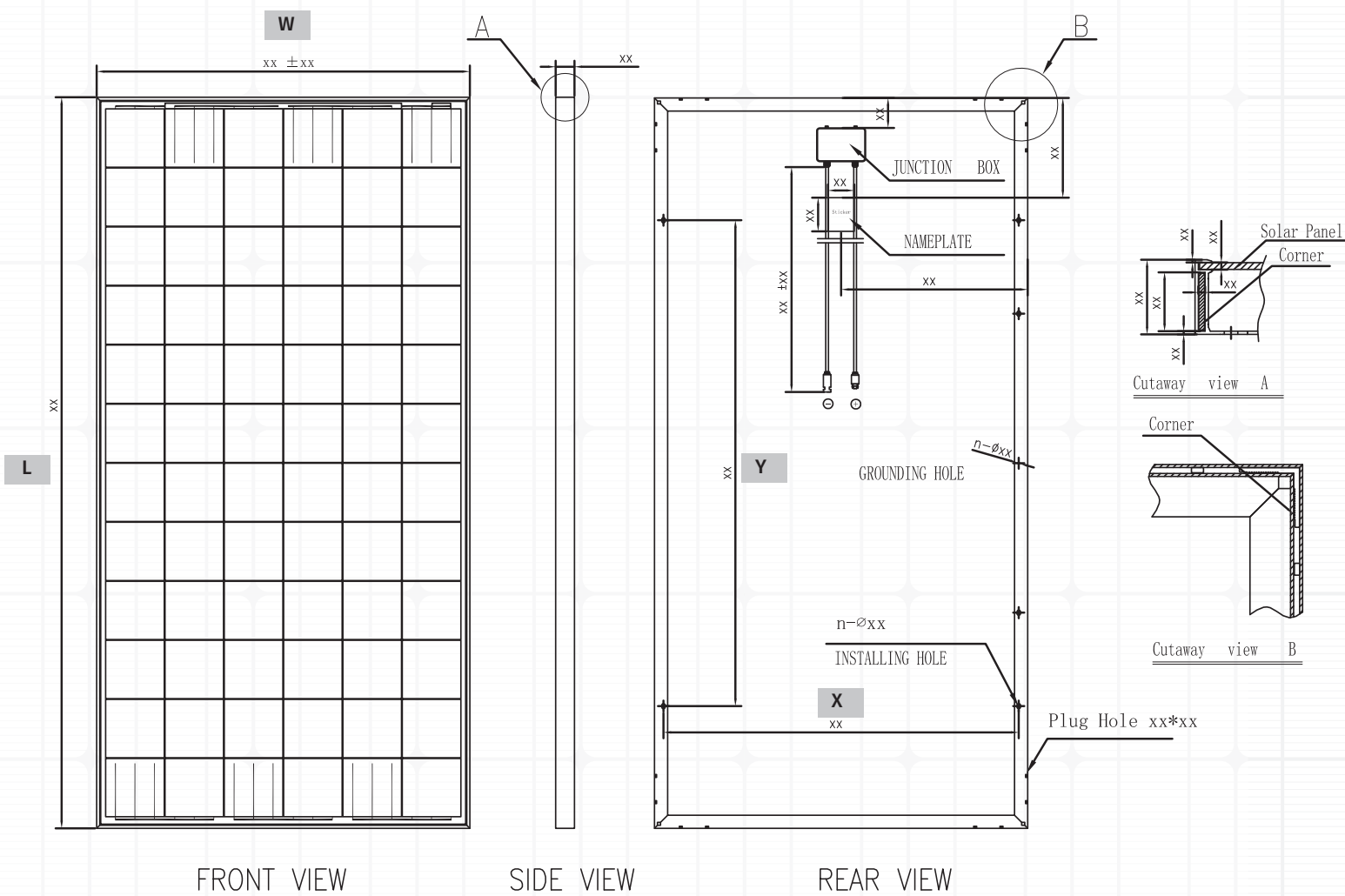
Solar Pumps:

- This solar inverter with MPPT VF drive will give maximum torque even at minimum sunlight
- There is no need of any battery, directly connect the panel to the inverter and the output of the inverter can be connected to a three phase motor
- DSP based intelligent Maximum Power Point Tracking (MPPT) will give 35% more energy
- VF drive will give constant torque for wide range of intensity
- Built in Dry Run protection
- Built in Lightning Arrestor

Model No.	MxPOWER-2		MxPOWER-5		MxPOWER-10	
Power rating	1 HP	2HP	3HP	5HP	7.5HP	10HP
Input voltage Voc (PV DC Voltage)	200V-750V	350V-750V	500V-750V	650V-750V	800V-1000V	800V-1000V
Input Current Imax	5A	6A	7A	8A	15A	20A
PV Wattage	750W-1200W	1500W-2400W	2250W-3600W	3500W-6000W	5600W-9400W	7500W-12000W
O/P Voltage 3 Ph Vac	240V-440V	240V-440V	240V-440V	240V-440V	240V-440V	240V-440V
O/P Frequency	0-60Hz	0-60Hz	0-60Hz	0-60Hz	0-60Hz	0-60Hz
Best water flow @	40-50 Hz	40-50 Hz	40-50 Hz	40-50 Hz	40-50 Hz	40-50 Hz
MPPT Tracking @ every	10 ms	10 ms	10 ms	10 ms	10 ms	10 ms
MPPT Tracking efficiency	> 98%	> 98%	> 98%	> 98%	> 98%	> 98%
Cumulative Discharge with MPPT	1.3 Times	1.3 Times	1.3 Times	1.3 Times	1.3 Times	1.3 Times
Head Range In Mtrs.	100	120	200	250	300	325
Ambient Temp.	45°C	45°C	45°C	45°C	45°C	45°C
Humidity	95%	95%	95%	95%	95%	95%
Noise Level @ 1 Mtr.	< 50dB	< 50dB	< 50dB	< 50dB	< 50dB	< 50dB
Enclosure Type	IP 55	IP 55	IP 55	IP 55	IP 55	IP 55
Cooling System	Convection	Convection	Convection	Convection	Convection	Convection
Natural Effective Pumping Hours	-7-9	-7-9	-7-9	-7-9	-7-9	-7-9
Pump Selection	Any 3 Phase AC Pump					
Compatibility with AC Power Supply	External automatic change over available for AC/DC operation					
Display - 4 Line LCD	PV Array Voltage, Current, Wattage, Frequency, O/P Voltage					
Protection	Reverse polarity, Short circuit, Over current, Over voltage, Lightning, Dry run(sensor less), Over temperature					
Data Collection	RS484 port for instant data collection and can be accessed via net work.					

SUSTAINABLE PRODUCTS & A HAPPY LIFE FOR EVERYONE

We believe that infusing innovation in our everyday life can transform the way we look at future. That is why MxPower Solar endeavours to discover, develop and deliver specific products addressing the unique needs of corporate, government, commercial establishments or residences.



SOLAR PANEL TECHNICAL DATA

Models	MxP 06XX (XX = 03 or 05)		MxP 12XX (XX = 10 or 12)		MxP 12XX (XX = 37- 45)			MxP1275	MxP12100	MxP12150	MxP60cXXX (XXX = 250 - 270)		MxP 72cxxx (xxx=300 - 305)	
Electrical Data														
Rated Power (Wp)	3	5	10	12	37	40	45	75	100	150	250	270	300	305
Maximum Voltage (Vmp)	8.64	8.95	17.51	17.52	17.72	17.82	17.95	18.42	17.62	18.2	31.01	32.01	36.6	36.7
Maximum Current (Imp)	0.35	0.56	0.56	0.68	2.1	2.24	2.5	4.08	5.68	8.34	8.07	8.47	8.2	8.32
Open Circuit Voltage (Voc)	10.8	10.8	21.5	21.7	21.9	21.5	21.5	21.52	21.52	22.5	37.95	38.67	45.2	45.4
Short Circuit Current (Isc)	0.37	0.61	0.65	0.78	2.3	2.41	2.7	4.29	5.98	8.67	8.51	9.05	8.6	8.7
Module Efficiency (%)	9.53%	9.53%	9.53%	11.43%	12.03%	12.95%	12.95%	13.05%	13.30%	13.54%	15.15	15.35	15.40	15.65
Temperature Coefficients														
Tc of Open Circuit Voltage	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.45%/°C	-0.31 % /°C	-0.31 % /°C	-0.31 % /°C	-0.31 % /°C
Tc of Short circuit Current	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	-0.35%/°C	0.052%/°C	0.052%/°C	0.052%/°C	0.052%/°C
Tc of Power	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C	-0.41%/°C
Maximum System Voltage	600V							1000 V						
NOCT	-0.45%/°C										44°C ± 2°C	44°C ± 2°C	44°C ± 2°C	44°C ± 2°C
Temperature Range	-40°C to + 85°C													
Mechanical Data														
Length x Width x Height	355 x 265 x 40	355 x 265 x 40	355 x 265 x 40	355 x 265 x 40	670 x 440 x 35	670 x 440 x 35	670 x 440 x 35	790 x 670 x 40	1000 x 670 x 40	1475 x 670 x 40	1655 x 985 x 40	1655 x 985 x 40	1980 x 985 x 40	1980 x 985 x 40
Mounting Holes (Y) mm	140		150		200			300	550	550	900		1000	
Mounting Holes (x) mm	175		235		640			635	635	635	955		955	
Module Weight (Kg)	1.26	1.26	1.26	1.26	3.6	3.6	3.6	6.15	7.51	9	18	18	22.5	22.5
Application Class	Class A													
Protection Class	Class II													
Superstrate	High transmission low iron tempered glass													
No of Cells	18	36						60			72			
Cell Encapsulant	EVA													
Back Sheet	Composite Film													
Frame	Anodized aluminium frame with twin wall profile													
Mechanical Load Test	5400 Pa													
Maximum Series Fuse Rating	5 A				10 A				15 A					
Cable													4 mm ²	4 mm ²
Connectors													MC4	MC4

Contact Us:

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