Lubi SOLAR

Harvesting

THE POWER OF SUN

KEY FEATURES

- 5 Busbar solar cell adopts new technology to improve the efficiency of modules, offers a better aesthetic appearance, making it perfect for rooftop installation.
- IP68 junction box for long-term weather endurance.
- Heavy snow load up to 5400 Pa.
  Wind load upto 2400Pa.
- Our high-transmission glass features a unique anit-reflective coating that directs more light on the solar cells, resulting in a higher energy yield.
- First choice for millions of banks and investors, this size is well-suited for almost all PV applications.
- Higher module conversion efficiency(up to 18%)
- Positive tolerance of up to 3% delivers higher output reliability.
- 100% In-House automatic manufacturing.
- Certified for PID free modules.
- Advanced glass and solar cell surface texturing allow for excellent performance in low-light environments.

ISO9001:2015, ISO 14001:2004, OHSAS 18001:2007 certified company

IEC61215, IEC61730, IEC62804(PID), IEC61701, IEC62716, IEC61853 certified products

IS 14286 / IEC 61215
IS / IEC 61730 (P1 & P2)
R-72002380

MONO CRYSTALLINE SOLAR PV MODULE 5BB • 60 CELLS • 275 - 295 WATT

Electrical Parameters at Standard Test Conditions STC & NOCT

Model Type	LE18M275		LE18M280		LE18M285		LE18M290		LE18M295	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Power Output Pmax (W)	275	205.15	280	208.88	285	212.61	290	216.34	295	220.07
Voltage at Pmax V mpp (V)	32	29.89	32.25	30.12	32.47	30.33	32.73	30.57	33.04	30.86
Current at Pmax I mpp (I)	8.62	6.86	8.71	6.93	8.8	7.01	8.88	7.08	8.95	7.13
Open-circuit Voltage VOC (V)	38.02	35.74	38.25	35.96	38.43	36.12	38.65	36.33	38.92	36.58
Short-circuit Current ISC (I)	9.09	7.3	9.17	7.36	9.28	7.45	9.37	7.52	9.45	7.59
Module Efficiency % (%)	16.91		17.21		17.52		17.83		18.14	

STC : 1000 W/m² irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3.
NOCT : 800 W/m² irradiance, ambient temperature 20°C, wind speed 1 m/sec

Thermel Characteristics

Nominal Operating Cell Temperature	NOCT	°C	46+/-2
Temperature Coefficient of Pmax	γ	%/°C	-0.350
Temperature Coefficient of VOC	β	%/°C	-0.301
Temperature Coefficient of ISC	α	%/°C	0.05

Operating Conditions

Max. System Voltage	1500Vdc
Max. Series Fuse Rating	15A
Limiting Reverse Current	20A
Operating Temperature Range	-40°c to 85°c
Max. Static Load, Front	5400Pa
Max. Static Load, Back (e.g., wind)	2400Pa
Max. Hailstone Impact (diameter / velocity)	25mm / 23.3 m /s

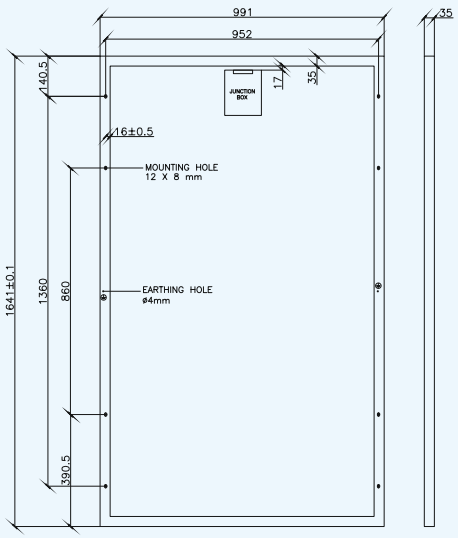
Mechanical Data

Dimensions (L / W / H)	1641mm / 991mm / 35mm
Weight	18.3kg
Front Cover (material / thickness)	AR coated high transmission low iron tempered glass / 3.2 mm
Cell (qty. / material / dim./no. of busbars)	60 / Monocrystalline Silicon/ 156.75mm x 156.75mm / 5BB
Encapsulate (material)	Ethylene vinyl acetate (EVA)
Backsheet	UV Protected
Frame (material / color)	Anodized aluminum alloy / silver
Junction Box (protection degree)	IP68, 3 bypass diodes
Cable (length / cross-sectional area)	1200mm / 4mm2
Plug Connector (type / protection degree)	MC4 / IP68

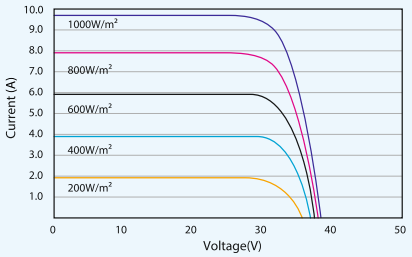
Packaging Specifications

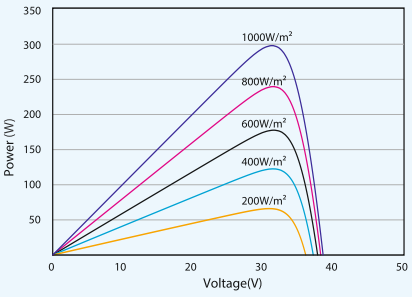
Number of Modules Per Pallet	30
Number of Pallets per 40' Container	28
Packaging Box Dimensions (L / W / H)	1685mm / 1115mm / 1150mm
Box Weight	600kg

Engineering Drawing (mm)

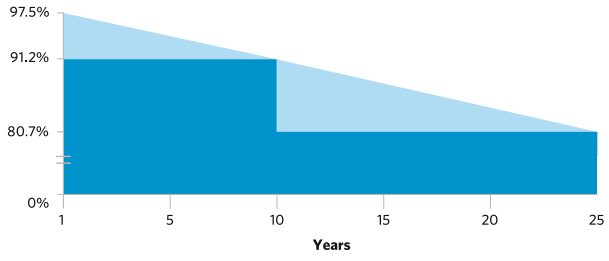


Electrical Performance





Linear Performance Warranty



- 90% of the specified minimum output of the module for a 10 years period
- 80% of the specified minimum output of the module for a 25 years period

- 10-year product warranty
- 25-year linear performance warranty

MONO CRYSTALLINE SOLAR PV MODULE 5BB • 72 CELLS • 335 - 355 WATT

Electrical Parameters at Standard Test Conditions STC & NOCT

Model Type	LE24M335		LE24M340		LE24M345		LE24M350		LE24M355	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Power Output Pmax (W)	335	249.91	340	253.64	345	257.37	350	261.1	355	264.83
Voltage at Pmax V mpp (V)	38.47	35.93	38.73	36.17	38.92	36.35	39.04	36.46	39.31	36.72
Current at Pmax I mpp (I)	8.73	6.96	8.78	7.01	8.87	7.08	8.97	7.16	9.04	7.21
Open-circuit Voltage VOC (V)	45.64	42.9	45.76	43.01	45.91	43.16	46.02	43.26	46.44	43.65
Short-circuit Current ISC (I)	9.18	7.37	9.27	7.44	9.35	7.51	9.48	7.61	9.54	7.66
Module Efficiency % (%)	17.23		17.49		17.75		18.01		18.26	

STC : 1000 W/m² irradiance, 25°C cell temperature, AM 1.5g spectrum according to EN 60904-3.
NOCT : 800 W/m² irradiance, ambient temperature 20°C, wind speed 1 m/sec

Thermel Characteristics

Nominal Operating Cell Temperature	NOCT	°C	46+/-2
Temperature Coefficient of Pmax	γ	%/°C	-0.350
Temperature Coefficient of VOC	β	%/°C	-0.301
Temperature Coefficient of ISC	α	%/°C	0.05

Operating Conditions

Max. System Voltage	1500Vdc
Max. Series Fuse Rating	15A
Limiting Reverse Current	20A
Operating Temperature Range	-40°c to 85°c
Max. Static Load, Front	5400Pa
Max. Static Load, Back (e.g., wind)	2400Pa
Max. Hailstone Impact (diameter / velocity)	25mm / 23.3 m /s

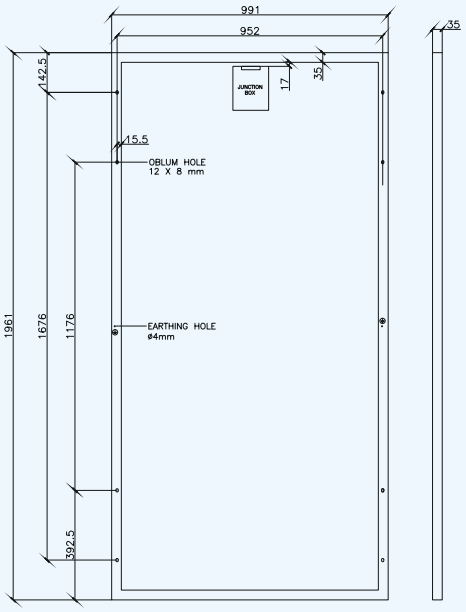
Mechanical Data

Dimensions (L / W / H)	1961mm / 991mm / 35mm
Weight	21.5kg
Front Cover (material / thickness)	AR coated high transmission low iron tempered glass / 3.2 mm
Cell (qty. / material / dim./no. of busbars)	72 / Monocrystalline Silicon/ 156.75mm x 156.75mm / 5BB
Encapsulate (material)	Ethylene vinyl acetate (EVA)
Backsheet	UV Protected
Frame (material / color)	Anodized aluminum alloy / silver
Junction Box (protection degree)	IP68, 3 bypass diodes
Cable (length / cross-sectional area)	1200mm / 4mm2
Plug Connector (type / protection degree)	MC4 / IP68

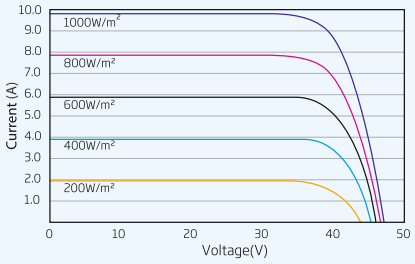
Packaging Specifications

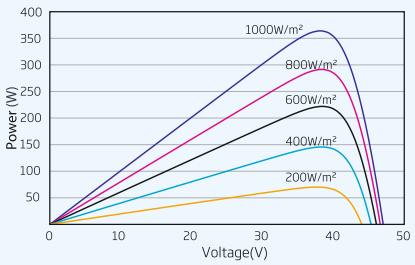
Number of Modules Per Pallet	30
Number of Pallets per 40' Container	24
Packaging Box Dimensions (L / W / H)	2005mm / 1115mm / 1150mm
Box Weight	700kg

Engineering Drawing (mm)

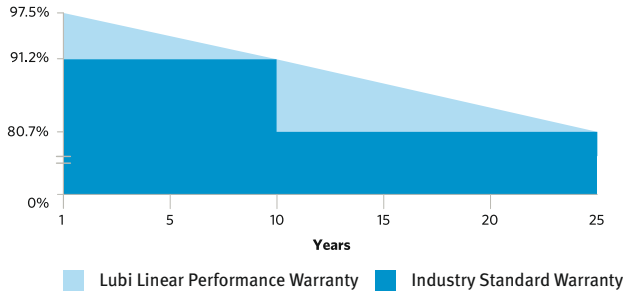


Electrical Performance





LINEAR PERFORMANCE WARRANTY

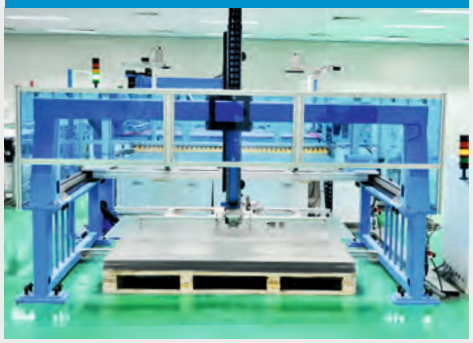


- 90% of the specified minimum output of the module for a 10 years period
- 80% of the specified minimum output of the module for a 25 years period
- 10-year product warranty
- 25-year linear performance warranty

STRINGER WITH AUTO-LAYUP

AUTOMATIC DOUBLE STAGE LAMINATOR

AUTOMATIC GLASS LOADING



AUTOMATIC EVA & BACKSHEET LOADING

FULLY AUTOMATIC CONVEYER

AUTOMATIC SUN-SIMULATOR

MANUFACTURING FACILITY

150 MW Fully Automatic Line

- PV module range from 5 Wp to 335 Wp
- Facility spread over 80,000 sq ft area
- CB Report for IEC 61215, 61730 1-2
- ISO 9001-2015, ISO 14001 & OHSAS 18001 certified company
- MNRE & STQC Approval

QUALITY ASSURANCE

- High quality control standards
- High quality Component from International Supplier
- Enhanced reliability through use of distinctive encapsulant and back sheet
- PID free modules (85°C / 85RH for 288hrs)
- Optimized edge clearance for high quality rugged design
- 2x100 % Electroluminescence checking to ensure defect free modules.
- 100%In-line hi-pot testing (H.V+GB+IR)
- High FF for improved energy conversion efficiency
- Torsion and corrosion resistant with anodized aluminum frame
- Unique design of back-sheet for high resistance to moisture ingress

APPLICATION

- Megawatt Installation
  - Solar Farms : 1MW to 50MW
- Rooftop Installation
  - Manufacturing Unit
  - Commercial office
  - Housing / Domestic power packs
- Emergency Backup
- Rural Power
- Solar Pumping applications
- Telecommunication
  - Cell Tower
- On-grid large scale utility systems

Lubi Electronics

Sardar Patel Ring Road, Nr. Karai Gam Patia, Nana Chiloda,Dist. : Gandhinagar - 382 330. Gujarat, INDIA
Tel. : **+91-79-6674 5300** Fax : **+91-79-6674 5599** E-mail : **info@lubisolar.com / export@lubisolar.com**
Website : **www.lubisolar.com**