



Mars M3

EL-440~460M3-72H

PERC Technology

Mono Crystalline PV Modules

144

CELLS



Micro-crack
Free



PID
Resistant



Salt Mist and Ammonia
Corrosion Resistant



German
Engineering



Tier 1
Choice
of Materials

GERMAN QUALITY

East Lux solar panels are made from top grade materials, automated robotic lines, German technology and standards, making the quality difference.

PERFORMANCE & INVESTMENT GUARANTEE

East Lux assures high investment, security and warranty claims by providing linear performance guarantee of 25 years and 12 years of product warranty.

Reliable Quality

- IEC61215, IEC61730(2016), IEC TS 62804-1-1:2020 (Anti PID)
- ISO 9001:2008 Quality management systems
- ISO 14001:2004 Environmental management systems
- BS OHSAS 18001: 2007 Occupational health and safety management system
- Positive power tolerance: 0~+5W
- 100% Triple EL inspection ensure free of defects



PLUS SORTING

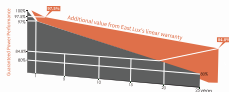
0~+5W positive sorting system to assure high output.

STABLE & STRONG

Capable to bear heavy snow loads up to 5400pa and wind loads up to 2400pa.

Linear Performance Warranty

12 years product warranty
25 years linear power warranty

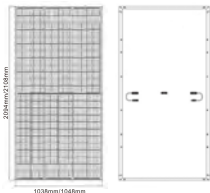


■ German
■ Quality
■ Guarantee
■ Linear performance warranty
■ Standard performance warranty

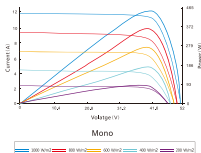
Electrical Characteristics

STC	EL-440M3-72H	EL-445M3-72H	EL-450M3-72H	EL-455M3-72H	EL-460M3-72H
Maximum Power(Pmax)	440W	445W	450W	455W	460W
Optimum Operating Voltage(Vmp)	40.50V	40.80V	41.00V	41.82V	42.13V
Optimum Operating Current(Imp)	10.86A	10.92A	10.98A	10.88A	10.92A
Open Circuit Voltage(Voc)	49.00V	49.20V	49.50V	49.85V	50.01V
Short Circuit Current(Isc)	11.30A	11.36A	11.42A	11.42A	11.45A
Module Efficiency	20.24%	20.47%	20.70%	20.93%	21.16%
Operating Module Temperature	-40°C to +85°C				
Maximum System Voltage	1500V DC (IEC)				
Power Tolerance	0→+5W				
STC	Irradiance 1000 W/m ² , module temperature 25°C, AM=1.5; Best in Class AAA solar simulator (IEC 60904-9) used				

Engineering Drawing



I-V Curve



Excellent performance under weak light conditions: at an irradiation intensity of 800W/m² (AM 1.5, 25°C), 95.0% or higher of the STC efficiency(1000W/m²) is achieved.

Mechanical Characteristics

Solar Cell	168mm 9BB Monocrystalline silicon cells
No. of Cells	144(6x12x2)
Dimensions	2108x1048x35mm
Weight	24.5kg
Front Glass	3.2mm(0.13 inches) tempered glass
Frame	Anodized aluminium alloy
Junction Box	Ip67 rated
Output Cables	TUV (2Pfg1169:2007) 4.0 mm ² (0.006 inches ²), 300mm/Customized
Connectors	MC4 connectors

Temperature Characteristics

NOCT	45±2°C
Temperature Coefficient of Pmax	-0.380%/°C
Temperature Coefficient of Voc	-0.300%/°C
Temperature Coefficient of Isc	0.060%/°C

Packing Configuration(35mm)

Per Pallet	30Pieces
Per Container (20' GP)	282Pieces
Per Container (40' HQ)	704Pieces

Note: Specifications subject to technical changes and tests. We reserves the right of final interpretation.