



# Mars M3

EL-435~455M3-72H

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 GURANTEE

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

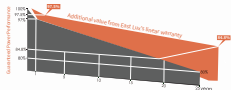
0~+5W positive sorting system to assure high output.

## 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

# SPECIFICATIONS

## Module Type

	EL-435M3-72H		EL-440M3-72H		EL-445M3-72H		EL-450M3-72H		EL-455M3-72H	
	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT	STC	NMOT
Peak Power (Pmax)	435W	321W	440W	324W	445W	327W	450W	330W	455W	333W
Open Circuit Voltage (Voc)	49.40V	45.48V	49.60V	45.51V	49.79V	45.54V	49.98V	45.56V	50.17V	45.59V
Short circuit Current (Isc)	11.36A	9.09A	11.42A	9.16A	11.48A	9.22A	11.54A	9.29A	11.60A	9.35A
Peak Power Voltage (Vmpp)	40.81V	37.56V	41.01V	37.67V	41.20V	37.77V	41.40V	37.88V	41.59V	37.98V
Peak Power Current (mpp)	10.66A	8.55A	10.73A	8.60A	10.80A	8.66A	10.87A	8.71A	10.94A	8.77A
Component Efficiency (%)	19.98%		20.21%		20.44%		20.67%		20.90%	

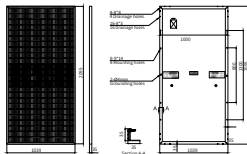
STC(Standard Testing Conditions): Irradiance 1000W/m<sup>2</sup>, Cell Temperature 25°C, AML5

NMOT(Nominal Module Operating Temperature): Irradiance 800W/m<sup>2</sup>, Ambient Temperature 20°C, Wind Speed 1m/s

## Temperature Characteristics

Standard Working Temperature (NMOT)	45±2°C
Peak Power Temperature Coefficient	-0.350%/°C
Temperature Coefficient of Open Circuit Voltage	-0.275%/°C
Short-circuit Current Temperature Coefficient	+0.045%/°C
Working Temperature	-40°C to +85°C
Maximum System Voltage	DC1500V(IEC)
Maximum Fuse Rating	20A
Power Tolerance	0→±5W

## Module Dimensions(mm)



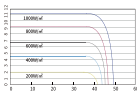
Specifications in this datasheet are subject to change without prior notice.

## Mechanical Data

Cell Type	166x83mm Mono
Cell Orientation	144(6x24)
Module Dimension	2095x1039x35mm
Weight	23.5kg
Front	3.2mm high transmittance, reinforced glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 (3 Bypass Diodes) 4.0mm <sup>2</sup>
Connecting Cable	300mm (+) / 300mm (-) Length can be customized
Plug Connector	MCA compatible connector
Maximum Mechanical Load	Front 5400Pa/Back 2400Pa

## I-V Curve

Current-Voltage Curve (455W)  
Current (A)



### STC

Irradiance 1000W/m<sup>2</sup>

Cell Temperature 25°C

AM=1.5

### NMOT

Irradiance 800W/m<sup>2</sup>

Ambient Temperature 20°C

Wind Speed 1m/s

AM=1.5

## Packing Configuration

Modules per Pallet: 31pcs

Modules per 40' HQ Container: 682pcs

Modules per 20' GP Container: 155pcs