

MONO-FACIAL MODULE

AL41-400~420MS-E3

P-Type /Positive power tolerance of 0~+3%/Max module efficiency 21.51%

- Suitable for ground power plants and distributed projects
- Advanced module technology delivers superior module efficiency
 - Gallium-doped Wafer · Non destructive cutting · MBB half-cut
- Excellent power generation performance
 - Excellent IAM and Weak light response · Low temperature ratings
 - 0.55% linear Power decline
- High module quality ensures long-term reliability
 - Strict selected material · Advanced technology · Leading standard
- Ultra-hydrophilic self-cleaning coating techniques

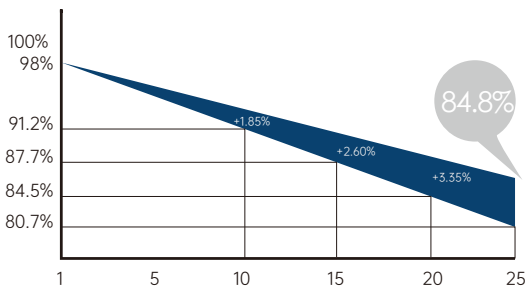


Complete System and IEC Product Certification

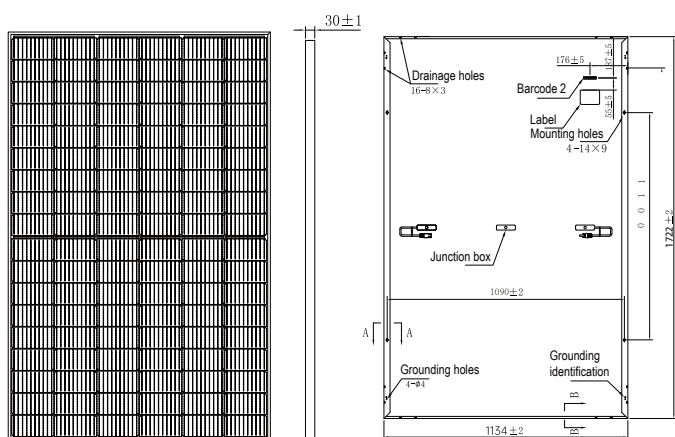
IEC 61215(2016), IEC 61730(2016) ISO9001: 2015: Quality Management System ISO14001: 2015: Environment Management System ISO45001:2018: Occupational Health and Safety Management System

12-year Material & Workmanship

25-year Linear Power Output

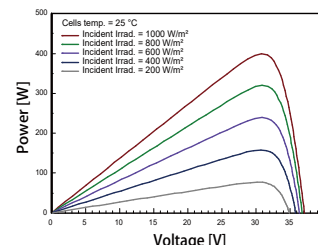
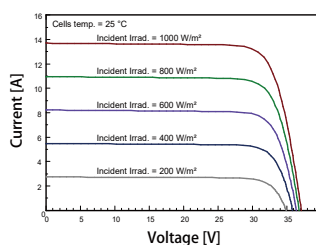


25-Year excess linear power output warranty



AL41-400~420MS-E3

MONO-FACIAL MODULE



Electrical Characteristics STC	AL41-400MS-E3	AL41-405MS-E3	AL41-410MS-E3	AL41-415MS-E3	AL41-420MS-E3
Maximum Power (Pmax)	400W	405W	410W	415W	420W
Power Tolerance	0~+5W	0~+5W	0~+5W	0~+5W	0~+5W
Module Efficiency	20.48%	20.74%	21.00%	21.25%	21.51%
Maximum Power Current (Imp)	12.95A	13.03A	13.10A	13.18A	13.26A
Maximum Power Voltage (Vmp)	30.90V	31.10V	31.30V	31.50V	31.70V
Short Circuit Current (Isc)	13.70A	13.77A	13.84A	13.91A	13.97A
Open Circuit Voltage (Voc)	37.10V	37.30V	37.50V	37.70V	37.90V

Values at Standard Test Conditions STC(AM1.5, Irradiance 1000W/m, Cell Temperature 25°C)

Electrical Characteristics NMOT	AL41-400MS-E3	AL41-405MS-B	AL41-410MS-E3	AL41-415MS-E3	AL41-420MS-E3
Maximum Power (Pmax)	299W	302.70W	306.30W	310.10W	313.90W
Maximum Power Current (Imp)	10.41A	10.47A	10.53A	10.59A	10.65A
Maximum Power Voltage (Vmp)	28.70V	28.90V	29.10V	29.30V	29.50V
Short Circuit Current (Isc)	11.06A	11.12A	11.18A	11.23A	11.28A
Open Circuit Voltage (Voc)	34.70V	34.80V	35.00V	35.20V	35.40V

NMOT(Nominal module operating temperature) , Irradiance of 800W/m, AM1.5, Ambient Temperature 20 °C, wind Speed 1m/s.

Mechanical Characteristics	
Cell Type	MonoP-Type, 182x182(±1)mm, 108(6x18)Half-Cut cells
Glass	3.2mm,High Transmission,Low Iron,Tempered Glass
Frame	Anodized Aluminum Alloy
Junction Box	IP68 Rated, With Bypass Diodes
Dimension	1722x1134x30mm
Output Cable	4 mm2 (EU),300 mm,length can be customized
Weight	22kg
Installation Hole Location	See Drawing Above

Characteristics	
Temperature Coefficient of Voc	-0.27%/°C
Temperature Coefficient of Isc	+0.04%/°C
Temperature Coefficient of Pmax	-0.35%/°C
Nominal Operating Cell Temperature (NOCT)	45°C ±2°C

Remark:Electrical data in this catalog do not refer to a single module and they are not part of the offer.They only serve for comparison among different module types.

Packing Information	
Container	40' HQ
Pallets per Container	26
Pieces per Container	936

Maximum Ratings	
Operating Temperature	-40°C~+85°C
Maximum System Voltage	1500VDC
Maximum Series Fuse Rating	25A

