

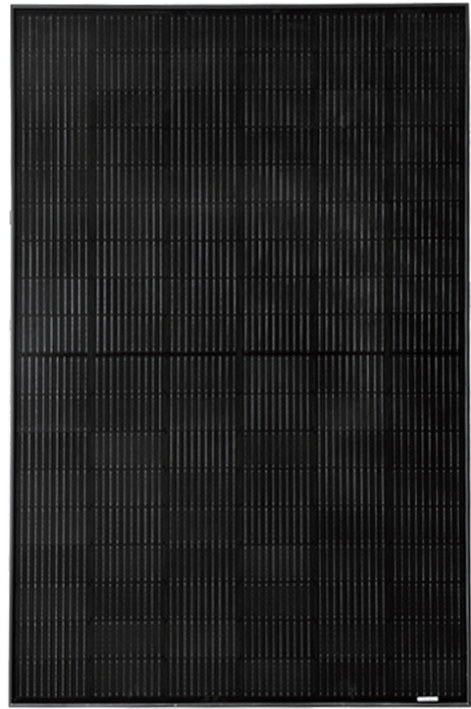
TIANTECH SOLAR GROUP CO.,LTD.

SUNERISE



400-420W

Mars Series:JC(400-420)-108M



Half-Cell High Efficiency PV Module

21.50%

Maximum Efficiency

0~±5W

Positive Power Tolerance

30years

Product Warranty

KEY FEATURES

- ⊙ Excellent module efficiency up to:21.50%
- ⊙ IP68 junction box for long-term weather endurance
- ⊙ Heavy snow load up to 5400 Pa, wind load up to 3600 Pa
- ⊙ PID: Selected material and stringent quality system ensure PID free
- ⊙ Applicable to harsh environment of deserts, farmlands and seashores
- ⊙ Much lower risk of hot spot

COMPREHENSIVE

Products and System Certificates

IEC 61215/IEC 61730/CE/INMETRO

ISO 9001: 2015/Quality management system

ISO 14001: 2015/Standards for environmental management system

OHSAS 18001: 2007/International standards for occupational health & safety

COMPREHENSIVE

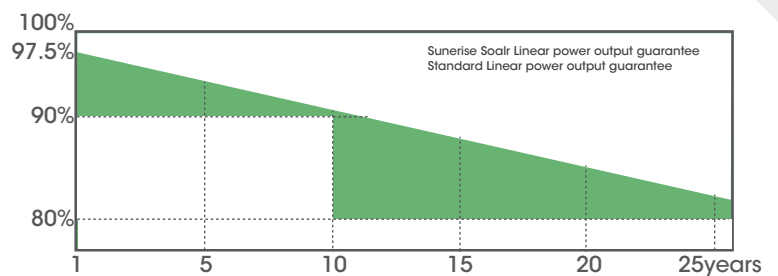
30
years

Linear power output warranty
-12 years minimum 92% power output
-30 years minimum 83% power output

12
years

Product warranty on materials and workmanship
According to the applicable Einnova Solarline
Limited Warranty Statement

CERTIFICATE



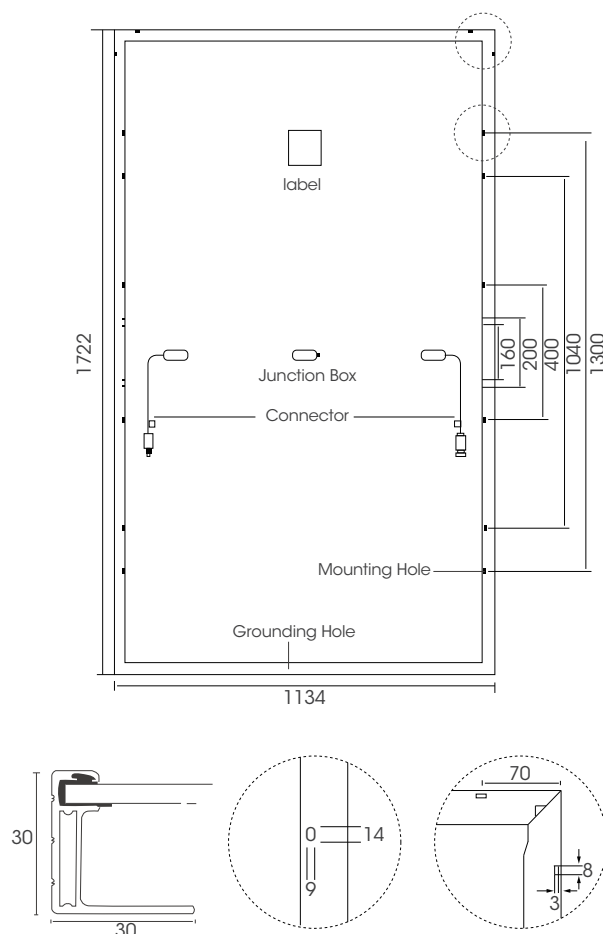
MECHANICAL SPECIFICATION

Cells Type	182x91mm
Dimension (LxWxT)	1722x1134x30mm
Weight	20.5kg
Cable	4.0mm ² , Portrait: 350mm(+)/350mm(-)
(Including connector)	Landscape: 1400mm(+)/1400mm(-)
No. of Cells	108 (6x18)
Glass	3.2mm High Transmission, Antireflection Coating
Junction box	IP68, 3 Bypass Diodes
Connector	MC4 Compatible
Packing	36pcs/pallet, 936pcs/40HQ

OPERATING PARAMETERS

Maximum system voltage	1000V / 1500V DC
Operating Temperature	-40 ~ +85°
Maximum series fuse rating	25A
Snow load, frontside	5400Pa
Wind load, backside	3600Pa
Nominal operating cell temperature	45C ± 2C
Application level	Class A

DESIGN



ELECTRICAL CHARACTERISTICS(STC)

Module Type **JC(400-420)-108M**

	400W	405W	410W	415W	420W
Maximum Power (Pmax)	400W	405W	410W	415W	420W
Open-circuit Voltage (V _{oc})	37.14V	37.23V	37.32V	37.41V	37.50V
Maximum Power Voltage (V _{mp})	31.01V	31.21V	31.45V	31.69V	31.93V
Short-circuit Current (I _{sc})	13.79A	13.87A	13.95A	14.03A	14.11A
Maximum Power Current (I _{mp})	12.90A	12.98A	13.04A	13.10A	13.16A
Module Efficiency (%)	20.48%	20.74%	21.00%	21.25%	21.50%
Power Tolerance	0~±5W				
Temperature Coefficient of I _{sc}	0.05%/C				
Temperature Coefficient of V _{oc}	-0.31%/C				
Temperature Coefficient of P _{max}	-0.35%/C				

Standard Test Environment: Irradiance 1000W/m², Cell temperature 25 C, Spectrum AM1.5

ELECTRICAL CHARACTERISTICS(NOCT)

Module Type **JC(400-420)-108M**

	302W	306W	310W	314W	318W
Maximum Power (Pmax)	302W	306W	310W	314W	318W
Open-circuit Voltage (V _{oc})	34.88V	35.12V	35.36V	35.60V	35.84V
Maximum Power Voltage (V _{mp})	29.26V	29.47V	29.68V	29.89V	30.10V
Short-circuit Current (I _{sc})	11.03A	11.10A	11.16A	11.22A	11.28A
Maximum Power Current (I _{mp})	10.32A	10.38A	10.43A	10.50A	10.57A

Standard Test Environment: Irradiance 800W/m², Ambient temperature 20 C, Spectrum AM1.5, Wind speed 1m/s