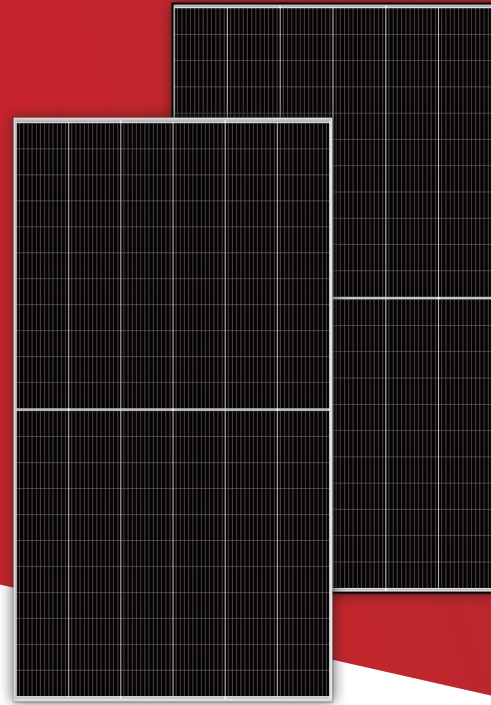


Zosma™ L

650-670W

High Efficiency Half-Cell Mono PERC Module



Excellent low irradiance performance



Better light trapping and current collection to improve module power output and reliability



Industry-leading, lowest thermal coefficient



Optimized electrical design and lower operating current for reduced hot spot loss and better temperature



2400Pa/5400Pa

Certified to withstand 2400 Pa of wind load and 5400 Pa of snow load



100% triple EL test, which greatly reduces the hidden cracks rate

PERFORMANCE INSURANCE



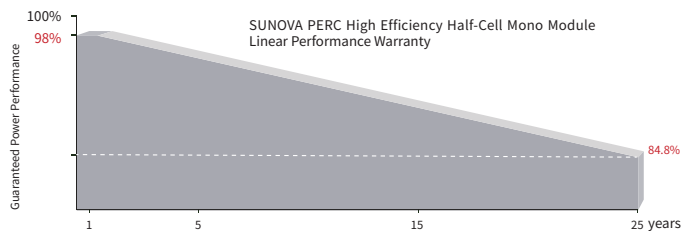
Munich RE



中国平安
PING AN
P & C INSURANCE CO CN SZN

* Optional performance warranty insurance. Please contact our local sales representatives for more information.

LINEAR PERFORMANCE WARRANTY



15 years

Product quality & process guarantee

25 years

Linear power guarantee

0.55 %

Annual degradation over 25 years

COMPREHENSIVE CERTIFICATES



IEC61215/IEC61730/IEC61701/IEC62716/
IEC62804/IEC60068/UL61730

ISO 9001: Quality Management System

ISO 14001: Environmental Management System Standard

ISO 45001: International Occupational Health and Safety Assessment System Standard

SA 8000: 2014 Social Accountability Management System

* Different markets have different certification requirements. Also, the products are under rapid innovation. Please confirm the certification status with regional sales representatives.

ELECTRICAL CHARACTERISTICS

Model of modules	SS-650-66MDH-G12		SS-655-66MDH-G12		SS-660-66MDH-G12		SS-665-66MDH-G12		SS-670-66MDH-G12	
	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT	STC	NOCT
Maximum power — P_{mp} (W)	650	484	655	488	660	492	665	495	670	499
Open-circuit voltage — V_{oc} (V)	45.27	42.73	45.48	42.93	45.64	43.08	45.87	43.30	46.05	43.47
Short-circuit current — I_{sc} (A)	18.58	15.01	18.63	15.05	18.66	15.08	18.71	15.12	18.75	15.15
Maximum power voltage — V_{mp} (V)	37.24	34.86	37.42	35.03	37.63	35.23	37.81	35.40	38.02	35.59
Maximum power current — I_{mp} (A)	17.46	13.89	17.51	13.93	17.54	13.96	17.59	14.00	17.63	14.03
Module efficiency — η_m (%)	20.92		21.09		21.25		21.41		21.57	
Power tolerance (W)	(0,+5)									
Maximum system voltage (V)	1500									
Maximum rated fuse current (A)	30									
Current operating temperature (°C)	-40~+85 °C									

STC (Standard Testing Conditions): Irradiance 1000W/m², Cell Temperature 25 °C, Spectra at AM1.5

NOCT (Nominal Operating Cell Temperature): Irradiance 800W/m², Ambient Temperature 20°C, Spectra at AM1.5, Wind at 1m/s

STRUCTURAL CHARACTERISTICS

Module dimensions (L*W*H)	2384 x 1303 x 35 mm
Weight	33.9 kg
Number of cells	132 cells
Cell	PERC Monocrystalline
Glass	Tempered, 3.2 mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy (Silver/Black)
Junction box	IP68, 3 bypass diodes
Output wire	4.0 mm ² , wire length: 300mm/1200mm/customized
Connector	MC4 Compatible
Mechanical load	Snow load: 5400 Pa / Wind load: 2400 Pa

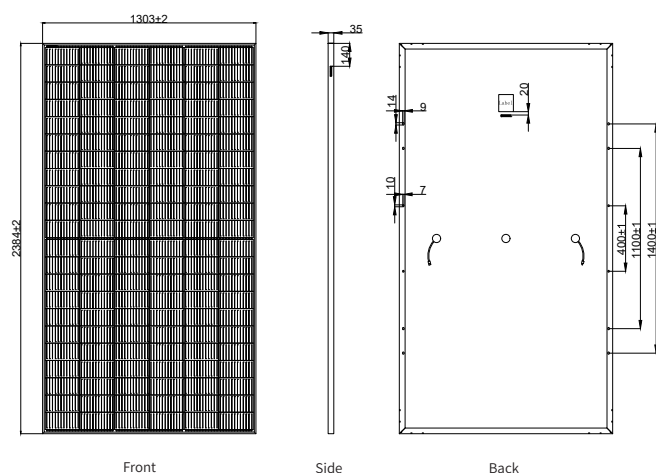
TEMPERATURE RATINGS

Temperature coefficient (P_{max})	-0.33 %/°C
Temperature coefficient (V_{oc})	-0.26 %/°C
Temperature coefficient (I_{sc})	+0.06 %/°C
Nominal operating cell temperature	43±2 °C

PACKAGING CONFIGURATION

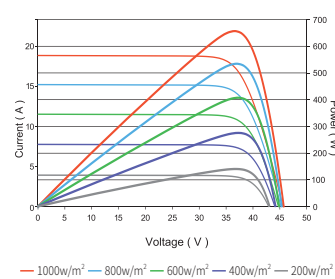
Container	40HQ
Quantity/pallet	31
Pallets/container	18
Quantity/container	558

MODULE DIMENSIONS (MM)



* The unmarked tolerance is ±1 mm
Length shown in mm

Current-Voltage & Power-Voltage Curves (665W)



Temperature Dependence of I_{sc} , V_{oc} , P_{max}

