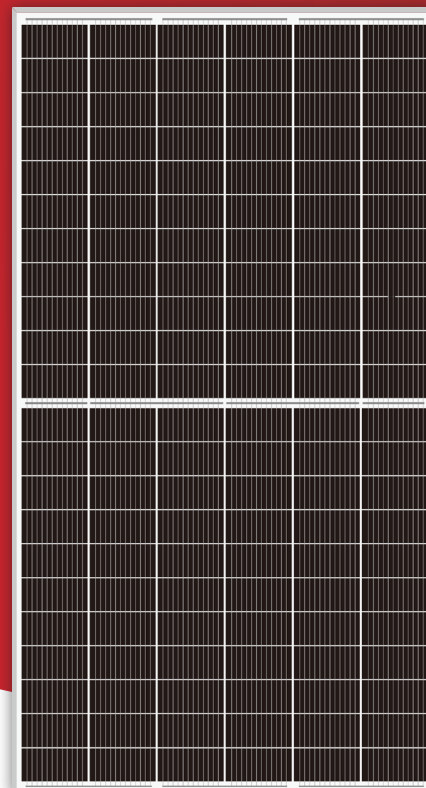


Zosma™ L

650-670W

High Efficiency Half-Cell Mono PERC Module



Excellent low irradiance performance.



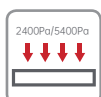
Better light trapping and current collection to improve module power output and reliability.



Industry leading lowest thermal co-efficient of power.



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

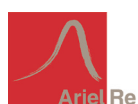


Certified to withstand:
wind load (2400 Pa) and
snow load (5400 Pa).



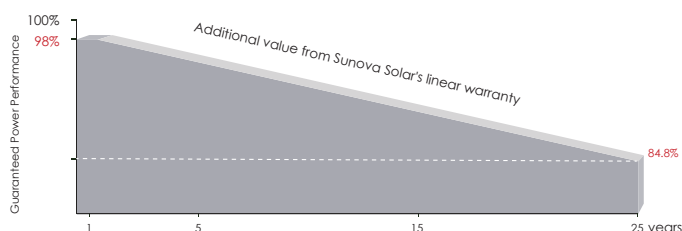
100% triple EL test
enabling remarkable reduction of
hidden crack rate of modules

PERFORMANCE INSURANCE



* Optional performance warranty insurance.
Please contact our local sales staff 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.

ELECTRIC 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	490	655	494	660	498	665	502	670	506
Open-circuit voltage — V _{oc} (V)	45.27	42.55	45.48	42.75	45.64	42.92	45.87	43.12	46.05	43.29
Short-circuit current — I _{sc} (A)	18.58	14.96	18.63	15.01	18.66	15.03	18.71	15.06	18.75	15.10
Maximum power voltage — V _{mp} (V)	37.24	34.63	37.42	34.82	37.63	35.01	37.81	35.18	38.02	35.36
Maximum power current — I _{mp} (A)	17.46	14.15	17.51	14.19	17.54	14.23	17.59	14.27	17.63	14.32
Module efficiency — η _m (%)	20.9		21.1		21.2		21.4		21.6	
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 210x105 mm
Glass	Tempered, 3.2 mm AR, High transmittance, Low iron
Frame	Anodized aluminum alloy
Junction box	IP68
Output wire	4.0 mm ² , wire length: 300mm/1200mm/customized
Connector	MC4 Compatible
Mechanical load	Snow load: 5400 Pa / Wind load: 2400 Pa

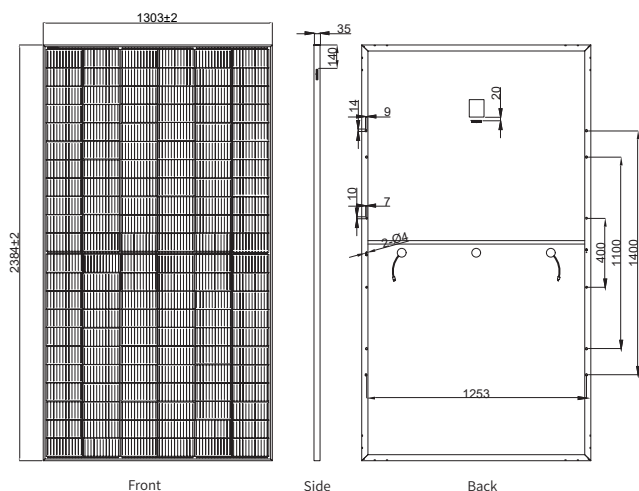
TEMPERATURE RATINGS

Temperature coefficient (P_{max})	-0.35 %/°C
Temperature coefficient (V_{oc})	-0.28 %/°C
Temperature coefficient (I_{sc})	+0.05 %/°C
Nominal operating cell temperature	43±2 °C

PACKAGING CONFIGURATION

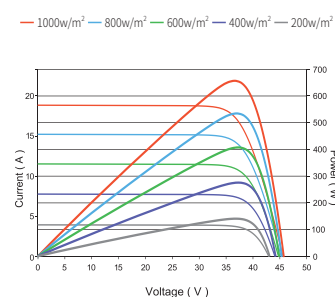
Container	40HQ
Quantity/pallet	31
Pallets/container	18
Quantity/container	558

MODULE DIMENSIONS (MM)



* The unbalance is ±1 mm
Length shown in mm

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

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