



MACRO-SOLAR

MS-M-220W/225W/230W

Cells

Cell Technology	Monocrystalline silicon
Number of cells per module	60
Cell dimensions	156x156mm

Mechanical Data

Dimension of the module L x W x H	1628x996x50mm
Weight	21kg

Electrical data

	MS-M-220W	MS-M-225W	MS-M-225W
Maximum power	220W	225W	225W
Open Circuit Voltage	36.00V	36.00V	36.00V
Maximum power point voltage	28.80V	28.80V	28.80V
Short circuit current	8.04A	8.22A	8.41A
Maximum power point current	7.64A	7.82A	7.99A

* At Standard Conditions (STC) Irradiance 1000 watt/m², spectrum AM 1,5 at a cell temperature of 25°C.

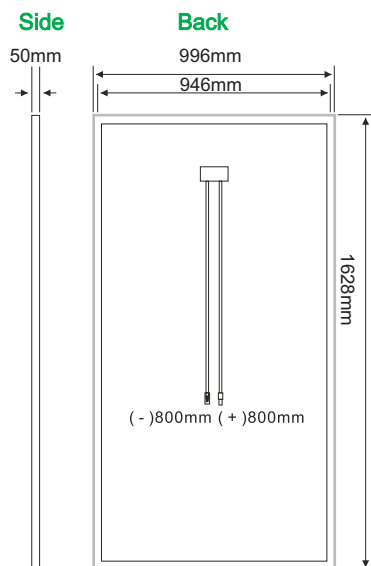
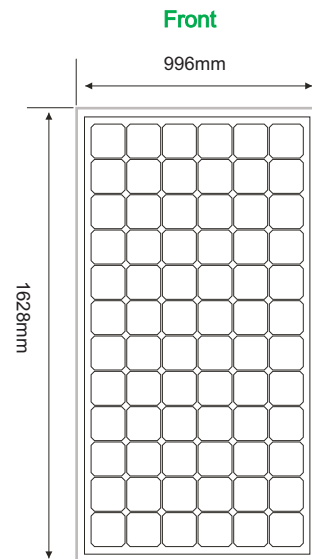
Thermal data

NOCT	47°C ± 2°C
Temperature Coefficient of V _{oc}	- (90 ± 5) mV / °C
Temperature Coefficient of I _{sc}	+ (0.065 ± 0.015) % / °C
Temperature Coefficient of Power	- (0.5 ± 0.05) % / °C

*NOCT: Normal Operational Temperature in Celsius

Additional data

Junction box type	(TUV)
Cable type	(TUV)
Output tolerance	+(-)3%
Frame material	Anodized aluminium
Front glass	3.2mm tempered glass
By-pass diodes	3 pieces



Module Construction

