



MACRO-SOLAR

MS-P-160W/170W/180W

Cells

Cell Technology	Polycrystalline silicon
Number of cells per module	48
Cell dimensions	156x156mm

Mechanical Data

Dimension of the module L x W x H	1312x996x35mm
Weight	15.5kg

Electrical data

	M-P-160W	MS-P-170W	MS-P-180W
Maximum power	160W	170W	180W
Open Circuit Voltage	28.80V	28.80V	28.80V
Maximum power point voltage	23.04V	23.04V	23.04V
Short circuit current	7.31A	7.77A	8.22A
Maximum power point current	6.95A	7.38A	7.82A

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

Thermal data

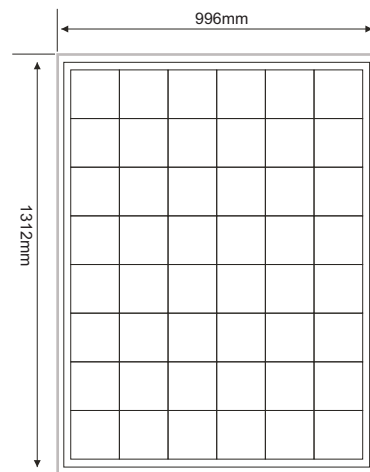
NOCT	47°C ± 2°C
Temperature Coefficient of V _{oc}	- (90 ± 5) mV / °C
Temperature Coefficient of I _{sc}	+ (0.065 ± 0.015) % / °C
Temperature Coefficient of Power	- (0.5 ± 0.05) % / °C

*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

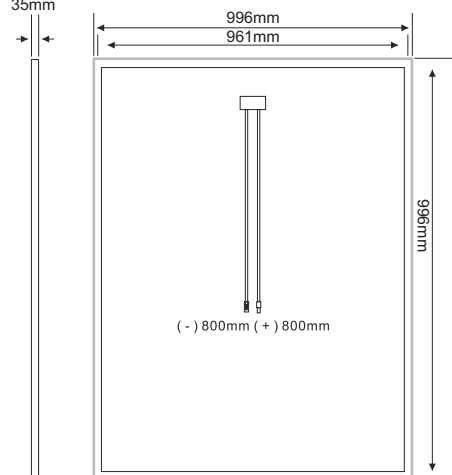
Front



Side

35mm

Back



Module Construction

