



MACRO-SOLAR

MS-M-18W/20W/22W

Cells

Cell Technology	Monocrystalline silicon
Number of cells per module	36
Cell dimensions	62.5 x 62.5 mm

Mechanical Data

Dimension of the module L x W x H	248x248x28mm
Weight	3.5kg

Electrical data

	MS-M-18W	MS-M-20W	MS-M-22W
Maximum power	18W	20W	22W
Open Circuit Voltage	21.60V	21.60V	21.60V
Maximum power point voltage	17.28V	17.28V	17.28V
Short circuit current	1.10A	1.22A	1.34A
Maximum power point current	1.04A	1.16A	1.28A

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

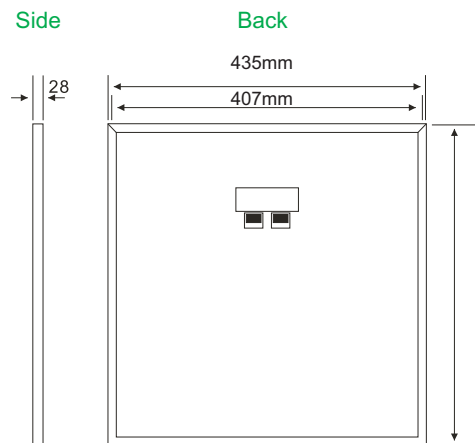
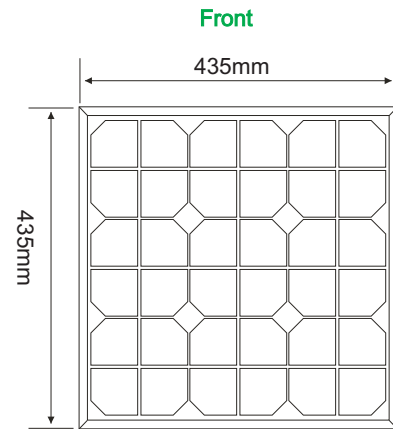
Thermal data

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	2 pieces



Module Construction

