## **Symmetry Small Area 12V**

## **Solar Modules**



The Symmetry range of small area modules are perfect for use in a wide variety of low power solar PV systems. Available in a range of sizes from 5 watts up to 160 watts, the Symmetry range uses German manufactured mono-crystalline, weatherproof A grade solar cells in a robust aluminum frame.

### Features:

- ■Product range products range from 5 watts to 160 watts
- ■High efficiency mono-crystalline silicon solar cells
- Low iron, high transmission glass is used for strength and high power output
- ■Weather-resistant IP65 junction box
- Framed with a strong, robust and corrosion-resistant aluminium frame with multiple mounting holes for ease of installation





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## 5 to 40 Watts

Model	SY-M5W-8M	SY-M10W-8M	SY-M20W-5M	SY-M30W-5M	SY-M40W-5M		
Nominal Peak Power (W)	5	10	20	30	40		
Cell Type	Mono-Crystalline						
Module Size L x W (mm)	250 x 185	335 x 235	430 x 345	605 x 345	550x 505		
Frame Depth (mm)	25						
Max. Power Voltage Vmp (V)	17.8						
Max. Power Current Imp (A)	0.28	0.56	1.12	1.69	2.25		
Open Circuit Voltage Voc (V)		21.6					
Short Circuit Current Isc (A)	0.30	0.61	1.21	1.82	2.43		
Power Output Tolerance Pmax (%)	±3%						
Operating Temperature (°C)	-40 ∼ +85						
Maximum System Voltage (VDC)	1000						
Net Weight (Kg)	1	1.2	2	2.5	3.2		
Junction Box IP Rating	IP65						
Diode	1 bypass diode						
Cable	8m x 1.3mm², red/black dual core with tinned cable ends (UV resistance)		5m x 1.3mm <sup>2</sup> , red/black dual core with tinned cable ends (UV resistance)				
Warranty	Workmanship and materials: 5 years Power output: At least 90% after 10 years and more than 80% after 25 years						

## 50 to 160 Watts

Model	SY-M50W	SY-M60W	SY-M80W	SY-M100W	SY-M160W		
Nominal Peak Power (W)	50	60	80	100	160		
Cell Type	Mono-Crystalline						
Module Size L x W (mm)	650 x 505	770 x 505	770 x 670	1200 x 540	1475 x 670		
Frame Depth (mm)	25	30		35			
Max. Power Voltage Vmp (V)	17.8						
Max. Power Current Imp (A)	2.81	3.37	4.49	5.62	8.99		
Open Circuit Voltage Voc (V)	21.6	.6 22.3					
Short Circuit Current Isc (A)	3.03	3.64	4.85	6.07	9.71		
Power Output Tolerance Pmax (%)	±3%						
Operating Temperature (°C)	-40 ∼ +85						
Maximum System Voltage (VDC)	1000						
Net Weight (Kg)	4.6	5	6	9	12		
Junction Box IP Rating	IP65						
Diode	2 bypass diode						
Cable	2 x 0.9m long 2.9 male & fema	5mm² cable with lle connector	2 x 0.9m long 4mm <sup>2</sup> cable with male & female connector				
Warranty	Workmanship and materials: 5 years Power output: At least 90% after 10 years and more than 80% after 25 years						
Accessories	Symmetry cables: 1m, 4m, 12m fitted with male & female connectors						