

## Symmetry Small Area 12V Solar Modules



The Symmetry range of small area module 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

### Applications:

- Off-Grid System
- Solar Fountains
- Caravans
- Boats
- Remote Lighting
- Telemetry
- Electric Fencing



# symmetry

## 5 to 40 Watts

Model Number	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	550 x 505
Frame Depth	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)	22.3				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 1.3mm <sup>2</sup> 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 moer than 80% after 25 years				

## 50 to 160 Watts

Model Number	SY-M50W	SY-M60W	SY-M80	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	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	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 2.5mm <sup>2</sup> cable		2 x 0.9m long 4mm <sup>2</sup> cable		
Connector	2 x MC4 compatible male & female connectors (25amps)				
Warranty	Workmanship and materials: 5 years Power output: At least 90% after 10 years and moer than 80% after 25 years				
Accessories	Symmetry cables: 1m, 4m, 12m				