

Sunmodule

SW 75/80/85 mono/R5E

With Sunmodule SW 75/80/85 mono/R5E, SolarWorld presents a solar energy module, which is ideally suitable for the requirements of applications of any kind to be performed off-grid. The highest demands with regard to manufacturing quality and the many years of SolarWorld's practical experience guarantee the solar power module's long life span at high levels of performance, even under extreme conditions.

The module is suitable for industrial applications such as the power supply of telecommunication systems at off-grid locations as well as for a number of applications that have to do with supplying power in remote rural areas.

Because of its compact dimensions and the solid workmanship of its aluminium frame, it can be mounted easily and flexibly. The water repellent junction box allows the modules to be connected easily and safely and facilitates a simple and quick installation process. The junction box is equipped with four grommets and cable terminals inside of the box. Series connection of modules for systems with higher system voltage is just as possible as is a parallel connection for systems with higher operating current.



Performance under standard test conditions

		SW 75	SW 80	SW 85
Maximum power	P_{max}	75 Wp	80 Wp	85 Wp
Open circuit voltage	V_{oc}	21.7 V	21.9 V	22.1 V
Maximum power point voltage	V_{mpp}	17.3 V	17.5 V	17.8 V
Short circuit current	I_{sc}	4.80 A	5.00 A	5.20 A
Maximum power point current	I_{mpp}	4.34 A	4.58 A	4.78 A

Performance at 800 W/m², NOCT, AM 1.5

		SW 75	SW 80	SW 85
Maximum power	P_{max}	53.6 Wp	57.2 Wp	60.8 Wp
Open circuit voltage	V_{oc}	19.6 V	19.8 V	20.0 V
Maximum power point voltage	V_{mpp}	15.5 V	15.7 V	15.9 V
Short circuit current	I_{sc}	3.97 A	4.13 A	4.30 A
Maximum power point current	I_{mpp}	3.46 A	3.64 A	3.81 A

Minor reduction in efficiency under partial load conditions at 25°C: at 200 W/m², 92% (+/- 10%) of the STC efficiency (1000 W/m²) is achieved.

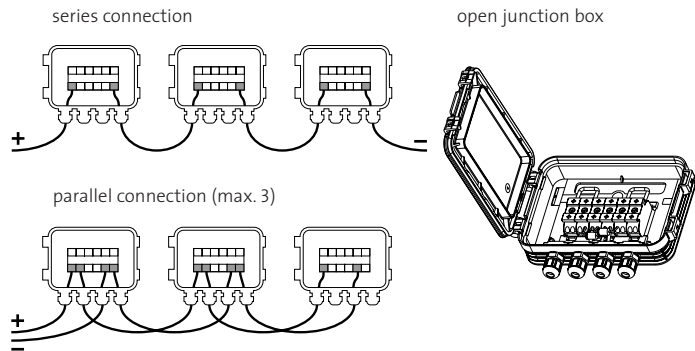
Component materials

Cells per module		36
Cell type	monocrystalline silicon	
Cell dimensions		125 x 125 mm ²

Thermal characteristics

NOCT		45.5°C
TC I_{sc}		0.036 %/K
TC V_{oc}		-0.33 %/K

Junction box with cable terminals and 4 grommets



System integration parameters

Maximum system voltage SC II	715 V _{DC}
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Additional data

Power tolerance	+/- 5%
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