

SolarMax SP-Series

3600SP • 4000SP • 4600SP • 5000SP

The competitive solution for high power residential solar plants



- Dual MPP tracker for optimum energy yield
- High efficiency
- Wide input voltage range
- Protection class IP65, suitable for outdoor use
- Quick and easy installation with MaxLink APP
- WLAN interface
- Optional with LCD display
- APP & Monitoring Portal
- 5 year warranty (optional 10 year warranty)
- Service hotline

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Technical specifications

		3600SP	4000SP	4600SP	5000SP
Input values	MPP voltage range	90 V ... 580 V	90 V ... 580 V	90 V ... 580 V	90 V ... 580 V
	MPP voltage range at nominal power	170 V ... 520 V	190 V ... 520 V	220 V ... 520 V	240 V ... 520 V
	Maximum DC voltage	600 V			
	Minimum DC voltage for startup	90 V			
	Minimum DC voltage for shutdown	70 V			
	Maximum DC current	22 A (2 x 11 A)			
	Maximum DC short circuit current	30 A (2 x 15 A)			
	Number of MPP trackers	2			
	Max. PV output per MPPT ¹⁾	MPPT1: 3,900 W MPPT2: 3,900 W	MPPT1: 4,400 W MPPT2: 4,400 W	MPPT1: 5,060 W MPPT2: 5,060 W	MPPT1: 5,500 W MPPT2: 5,500 W
	Number of string connections	2 (1/1)			
Connection type	Amphenol H4 (type MC4)				
Output values	Rated output power	3,600 W	4,000 W	4,600 W	5,000 W
	Maximum output apparent power	3,680 VA	4,400 VA	4,600 VA ⁽²⁾	5,000 VA ⁽²⁾
	Maximum AC current	16.0 A	19.1 A	22.0 A	23.8 A
	Mains nominal voltage	230 V			
	Mains voltage range	160 V ... 300 V			
	Mains frequency	50 Hz / 60 Hz			
	Mains frequency range	45 Hz ... 55 Hz / 55 Hz ... 65 Hz			
	Power factor cos (φ)	Adjustable from 0.8 overexcited to 0.8 underexcited			
	Distortion factor at rated output power	< 3 %			
	Power input at night	< 1 W			
	Connection type	Connector			
Efficiency	Maximum efficiency	97.5 %	97.5 %	97.6 %	97.6 %
	Euro efficiency	97.2 %	97.2 %	97.3 %	97.3 %
Ambient conditions	Protection class	IP65			
	Ambient temperature range	- 25 °C ... + 60 °C (Nominal power up to + 45 °C)			
	Relative humidity	0 % ... 100 % (not condensing)			
	Cooling	Air cooling			
	Maximum operating height above sea level	2,000 m (without derating) / 4,000 m max			
	Audible noise emissions	< 30 dB(A) @ 1 m			
Configuration	Display	App over WLAN connection + LED, optional with LCD display			
	Inverter topology	Transformerless			
	DC disconnecter	Integrated			
	DC polarity inversion protection	Integrated			
	Residual Current Monitoring Unit (RCMU)	Integrated			
	Grid protection interface	Integrated			
	Protection class (IEC 62109-1)	I			
	Overvoltage category (IEC 62109-1)	AC: III / DC: II			
Standard and guidelines	EMV	EN 61000-6-1, EN 61000-6-2, EN 61000-6-3, EN 61000-6-4			
	Grid connection	EN50549-1, VDE-AR-N 4105, IEC 61727, IEC 62116, VDE 0126-1-1, CEI 0-21			
	Device safety	IEC 62109-1, IEC 62109-2			
Interfaces	Data communication	WLAN (optional: RS485, GPRS)			
Weight and dimensions	Weight	12.8 kg			
	Dimensions (W x H x D)	335 mm x 426 mm x 125 mm			
Warranty	Standard warranty	5 years / optional 10 years			

¹⁾ Higher connected load permissible, but cannot be used by the inverter.

²⁾ Depending on selected standards

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