

SolarMax RX inverters, and SolarMax support: effective solutions for your PV project

Optimized Maintenance

Thanks to its modular design and compact, outdoor concept, RX inverters are easy to install and easy to maintain. RX power units are easily removed and inspected. Small and lightweight designs reduce spare part inventory costs with standard, high volume components.



Reliable service and support

SolarMax relies on a sustainable customer service and long term customer relations.

We support our customers from the early stages of the project and throughout its life cycle. SolarMax provides design support and commissioning, along with product training and maintenance.

Our modular service approach is flexible enough to meet every customer's needs.

Specifications

		SolarMax 500RX	SolarMax 533RX	SolarMax 600RX
Input values	MPP voltage range	500 ... 990V ⁱ	533 ... 990V ⁱ	600 ... 990V ⁱ
	MPP voltage range for P _{nom}	532 ... 900V ⁱ @ CosPhi=1.0; Uac nom	567 ... 900V ⁱ @ CosPhi=1.0; Uac nom	638 ... 900V ⁱ @ CosPhi=1.0; Uac nom
	Maximum DC voltage	1'000 V (1100 V) ⁱⁱ		
	Maximum DC current	960 A (240 A per power unit)		
	Number of MPP trackers	4		
	Number of independent power units	4		
	Maximum oversizing factor DC:AC	1.5 ⁱⁱⁱ		
DC Connection Type per power unit	Information per pole and power unit Threaded bolts 3 x M12			
	Multi tracker / DC cable copper (Cu): 1 DC cable minimum diameter 95 mm ² or 2 DC cables minimum diameter 70 mm ² or 3 DC cables minimum diameter 50 mm ²		Multi tracker / DC cable aluminium (Al): 1 DC cable minimum diameter 185 mm ² or 2 DC cables minimum diameter 120 mm ² or 3 DC cables minimum diameter 95 mm ²	
Output values	Rated output power	500kW ⁱ	533kW ⁱ	600kW ⁱ
	Maximum apparent output power	500kVA	533kVA	600kVA
	Nominal mains voltage	320V, 3 phase with ground	350V, 3 phase with ground	400V, 3 phase with ground
	Maximum AC current	920A per phase	908A per phase	884A per phase
	Mains nominal frequency / range	50 Hz / 45 Hz...55 Hz		
	Connection type	per phase threaded bolts 3 x M12 AC cables Cu 2 AC cables minimum diameter 300 mm ² 3 AC cables minimum diameter 150 mm ²		
Grid connection	Three-phase (without a neutral conductor)			
Grid support	Power factor (cos phi)	Adjustable from 0.80 overexcited to 0.80 underexcited		
	Distortion factor at rated power	< 3 %		
	Low Voltage Ride Through	Yes		
	Remote control of P, Phi, Q	Yes		
Efficiency	Max. efficiency	98.3 %	98.4 %	98.5 %
	European efficiency	98.1 %	98.2 %	98.3 %
Power input	Own consumption (night)	< 40W		
Environmental conditions	Max. altitude	2000 m above sea level (higher with derating)		
	Ambient temperature range	-20 °C...+50 °C		
	Ambient temperature range at rated power	-20 °C...+45 °C		
	Cooling air flow	Up to >4000 m ³ /h		
	Relative humidity	0...98 % (no condensation)		
	Noise Emissions	< 65 dBA (3 meters) ^{iv}		
Protection	IP protection class	Outdoor rated with dual zone concept: IP54 for electronics and IP44 for magnetics / heatsinks		
	Ground fault monitoring	Yes		
	Anti islanding	Yes		
	AC & DC overvoltage & temperature	Yes		
	AC & DC short circuit & overcurrent	Yes		
Configuration	Display	Color touch display and status-LED		
	Data logger	Data logger for energy yield, peak output and operating duration for the last 31 days, 12 months and 10 years		
	Galvanic Isolation	No galvanic isolation: direct connection to MV transformer with galvanically isolated windings for every inverter		
	EMC	EN 61000-6-2 / EN 61000-6-4 ^v		
	Standard / guideline compliance	G59/3 / Arrêté du 23/04/08 ^{iv}		
	Device safety	IEC 62109-1/2 ^{iv}		
Interfaces	Data communication	Ethernet and RS485		
	Status signaling contact	Potential-free terminal contact pair (configurable function)		
	Alarm input	Potential-free terminal contact pair (configurable function)		
	Inverter shut-off 1	Potential-free terminal contact pair		
	Inverter shut-off 2	Potential-free terminal contact pair		
Weight and dimensions	Weight	ca. 1600kg		
	Dimensions in mm (W x H x D)	2250 x 2290 x 1200		
Warranty	Standard warranty	5 years		
	Warranty extensions	to 10, 15, 20 or 25 years from installation		
Optional Full-Service MaxControl	Technical Availability guaranteed Duration	97% up to 25 years from installation Project-specific solutions on request		

ⁱ at cos(φ) = 1, Uac = Unom

ⁱⁱ mains operation up to 1000 Vdc

ⁱⁱⁱ dependent upon project-specific assessment

^{iv} prelim. data

^v in preparation