SOLARVERTER PRO PCU

Superior Performance

Solarverter PRO range from Luminous allows smart management of Solar Power, Grid Supply and Battery to deliver uninterrupted power for all electrical applications. Designed for high performance against the typically tough Indian grid conditions, Solarverter PRO is available from 2kVA to 10kVA

2 Years Warranty

Smart Solar optimization

User Controller Settings



MPPT **Maximum Power Point Tracking**
MPPT charge controllers are more efficient compared to PWM charge controllers as they convert 30% more power from solar panels.

User-friendly LCD Display
A user friendly display communicates important parameters like discharge time, grid availability, selected priority setting etc.

Guaranteed Safety
Comprehensive protection features include short-circuit, reverse polarity, battery over-charge etc.

Remote Monitoring
Multiple modes of connectivity for remote monitoring enables keeping track of solar generation and proactive maintenance

Smart Solar Optimization
Gives priority to solar in both backup and charging mode of operation thereby maximizing solar energy utilization.

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Solar Estimation Chart

Solution			Panel Connection Combination (Series-Parallel)	Approx. Roof Top Area Required (Sq. ft.)
Solar PCU	Solar Battery	PV Panel Watt		
SOLARVERTER PRO 2KVA	150Ah x 2	550Wp x 4 Nos.	2 (S) 2 (P)	120
SOLARVERTER PRO 3KVA	150Ah x 3	550Wp x 6 Nos.	3 (S) 2 (P)	240
SOLARVERTER PRO 3.5KVA	150Ah x 4	550Wp x 6 Nos.	3 (S) 2 (P)	240
SOLARVERTER PRO 5KVA	150Ah x 4	550Wp x 9 Nos.	3 (S) 3 (P)	540
SOLARVERTER PRO 6KVA	150Ah x 8	550Wp x 12 Nos.	5 (S) 4 (P)	720
SOLARVERTER PRO 7.5KVA	150Ah x 8	550Wp x 14 Nos.	7 (S) 2 (P)	840
SOLARVERTER PRO 10KVA	150Ah x 10	550Wp x 18 Nos.	9 (S) 2 (P)	1080

Solarverter PRO PCU



*WiFi Dongle to be purchased separately (optional)

Technical Specifications

Model Name	SOLARVERTER PRO 2KVA *eco*	SOLARVERTER PRO 3KVA	SOLARVERTER PRO 3.5KVA
Capacity (kVA)	2kVA	3kVA	3.5kVA
Nominal Battery Voltage (Vdc)	24V	36V	48V
Output Waveform	Sinewave		
SOLAR PHOTOVOLTAIC INPUT			
Type of Charger	MPPT		
Maximum PV power	2000W	3500W	3500W
Solar Input Voltage (Voc)	55V-107V	75V-150V	130V-220V
Solar Input Voltage range (Vmp)	45V-85V	60V-120V	110V-180V
No. of MPPT Channels	1		
GRID INPUT			
Input Supply Phase	Single Phase		
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac		
Mains mode (Unregulated UPS Mode)	110V-280Vac		140V-280V
BATTERY			
No. of Batteries	2	3	4
Battery Charging Current from Solar	30A		
Battery Charging Current from Grid	0A, 14A, 17A, 20A		0A, 4A-20A (user settable)
Charging Stages	Boost, Absorption, Float		
Type of Battery	Tubular/SMF/Flat		
INVERTER			
Switching Element	MOSFET		
Control	16 Bit DSP controlled		32 Bit DSP Controlled
Nominal Output Voltage (V)	230V ± 5%		230V ± 5%
Output Supply Phase	1 Phase 2 Wire		
Nominal Frequency	50 Hz		
Nominal Output Current	7.5A	11A	12.5A+/-1A
Output Voltage Distortion(THD)	<= 3%		<= 5%
SYSTEM DATA			
Transfer Time	<20 mS		
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery		
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode		
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode		
ENVIRONMENT			
IP Protection Level	IP20		
Operating Temperature	0-45 °C		
Storage Temperature	0-50°C		
Cooling	Forced Air Cooling		
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)		
GENERAL			
Dimension (L*W*H) [mm]	396x300x270	300x417x452	590x433x523
Net Weight (kg)	27.7kg	32.5kg	47.5kg

Technical specifications are subject to change without prior notice.

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Technical Specifications

Model Name	SOLARVERTER PRO 5KVA	SOLARVERTER PRO 6KVA
Capacity (kVA)	5kVA	6kVA
Nominal Battery Voltage (Vdc)	48V	96V
Output Waveform	Sinewave	
SOLAR PHOTOVOLTAIC INPUT		
Type of Charger	MPPT	
Maximum PV power	5000W	6000W
Solar Input Voltage (Voc)	130V-220V	180V-250V
Solar Input Voltage range (Vmp)	110V-180V	150V-200V
No. of MPPT Channels	1	
GRID INPUT		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode (Unregulated UPS Mode)	140V-280V	
BATTERY		
No. of Batteries	4	8
Battery Charging Current from Solar	30A	50A
Battery Charging Current from Grid	0A, 4A-20A (user settable)	0A, 14A, 17A, 20A
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
INVERTER		
Switching Element	MOSFET	IGBT
Control	32 Bit DSP Controlled	
Nominal Output Voltage (V)	230V ± 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	17.5A+/-1A	20A+/-1A
Output Voltage Distortion(THD)	<= 5%	
SYSTEM DATA		
Transfer Time	<20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
ENVIRONMENT		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
GENERAL		
Dimension (L*W*H) [mm]	511x300x484	620x300x487
Net Weight (kg)	54 kg	58 kg

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Technical Specifications

Model Name	SOLARVERTER PRO 7.5KVA	SOLARVERTER PRO 10KVA
Capacity (kVA)	7.5kVA	10kVA
Nominal Battery Voltage (Vdc)	96V	120V
Output Waveform	Sinewave	
SOLAR PHOTOVOLTAIC INPUT		
Type of Charger	MPPT	
Maximum PV power	7500W	10000W
Solar Input Voltage (Voc)	250V-400V	300V-500V
Solar Input Voltage range (Vmp)	200V-400V	250V-450V
No. of MPPT Channels	1	
GRID INPUT		
Input Supply Phase	Single Phase	
Input Voltage Mains mode (Regulated UPS Mode)	180-260 Vac	
Mains mode (Unregulated UPS Mode)	140V-280V	
BATTERY		
No. of Batteries	8	10
Battery Charging Current from Solar	30A	
Battery Charging Current from Grid	0A, 4A-20A (user settable)	
Charging Stages	Boost, Absorption, Float	
Type of Battery	Tubular/SMF/Flat	
INVERTER		
Switching Element	IGBT	
Control	32 Bit DSP Controlled	
Nominal Output Voltage (V)	230V ± 5%	
Output Supply Phase	1 Phase 2 Wire	
Nominal Frequency	50 Hz	
Nominal Output Current	26A+/-1A	34A+/-1A
Output Voltage Distortion(THD)	<= 5%	
SYSTEM DATA		
Transfer Time	<20 mS	
Protection	Overload Mains Load, Overload on Battery, Reverse Polarity, Short Circuit, Over Temperature, Low Battery	
Display Parameters	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
Indications	UPS On, Battery Low, Mains On, Smart Charge/ Boost Charging, Battery Charged/ Float Charge, Overload, Over Temperature Protection, Short Circuit under Battery Mode, MCB Trip/ Short Circuit in Mains Mode	
ENVIRONMENT		
IP Protection Level	IP20	
Operating Temperature	0-45 °C	
Storage Temperature	0-50°C	
Cooling	Forced Air Cooling	
Max. Relative Humidity @ 25 °C	Up to 95% (non-condensing)	
GENERAL		
Dimension (L*W*H) [mm]	690x400x500	740x400x580
Net Weight (kg)	78 kg	101 kg

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For more information



SOLARVERTER PRO New Range of Solar PCU

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