



Solar Inverter - 1 to 3 kW

Single Phase Output



## **Special Features**

- 16 bit DSP controllers
- · High efficiency
- True Bi-directional Solar Inverter
- Higher Array voltage capacity optionally available
- Inbuilt MPPT charge controller
- · Selectable source feature Grid / Battery
- DC fan for low power consumption
- Inbuilt isolation transformer for galvanic isolation



System Rating (KW)	1	2	3
Photovoltaic Input			
MPPT Range		65 - 110V DC	
Maximum PV power recommended (KW)	1	2	3
MPPT base Charge Controller			
Switching Element	MOSFET		
Controller	16 Bit DSP controlled		
Type of Charger	PWM with MPPT		
Grid Input			
Input Supply	230VAC , 50Hz (-20%, +15%), 1Phase 2 Wire		
Battery			
Battery Voltage	48V		
Grid through Battery charging capacity (%kw Rating)	0-50%		
Inverter			
Switching Element	MOSFET		
Control	16 Bit DSP controlled		
Nominal Output Voltage, Frequency (Hz)	230V AC L-N, 50Hz, 1Phase 2 Wire		
Output Waveform	Sine Wave		
Load Power Factor	0.6 lag to 1 ( Within KVA and KW rating)		
Voltage regulation	± 2%		
Voltage Stability in dynamic condition	Complies with IEC/EN 62040-3,Class 1		
"Output voltage distortion with 100% linear load"	< 3%		
"Inverter peak efficiency (Ref. STD IEC 61683)"	Up to 85%		
Protection degree with open doors	IP20		
Colour	RAL 7016 Texture		
Cooling	Forced Air		
Galvanic Isolation	Inbuilt isolation transformer at inverter output		
Protection	Under/Over voltage for Array & Battery. reverse polarity Output overload, short circuit, Over		
	temperature, Surge protection at Input, Output, Array & Battery path, MCB at Battery & Outp		
Display Parameter	1. Array - Voltage, Power, 2. Battery - Voltage, 3. Output - Voltage,		
Indications	MPPT Charger ON/OFF, Inverter ON, Inverter OFF, CV Mode ON, PV Array OFF,		
	Battery low trip, Battery low alarm, Over Load, Over Temperature, Short Circuit		
Temperature Operating	0-40 °C		
Max. Relative humidity @25°C (non condensing)	Up to 95%		
Max. Altitude above sea level without de-rating	1000 m (For higher altitude complies with IEC/EN 62040-3)		
Standard Compliance			

Note: 24 V Battery voltage option available for 1 kW

The information contained in this publication is subject to change without prior notice.

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