

Sunbird **3000**



Solar Inverter - 10 to 100 kW

Three Phase Output

Special Features

- Multiple 32 bit DSP controllers
- Space Vector Modulation
- Battery less operation
- High efficiency
- True Bi-directional Solar Inverter
- Higher Array voltage capacity optionally available
- Inbuilt charge controller
- MPPT – Achieved through Incremental Conductance Algorithms
- Modular construction gives higher MTTR
- Battery charging through Grid up to 100%
- Selectable source feature – Grid / Battery
- DC fan for low power consumption
- Inbuilt isolation transformer for galvanic isolation
- 128 x 64 Graphics display
- PF correction while on mains / Grid supply (Line interactive)
- Variable fan speed – for increased reliability, results into lesser dust suction inside the cabinet



Technical Specifications - Sunbird 3000

System Rating (KW)							
Photovoltaic Input	10	15	20	25	30	40 / 50	80 /100
MPPT Range	165 – 200 V				330 – 420 V		
Open Circuit Voltage	300 V				600 V		
Maximum PV power recommended (KW)	11	16.5	22	27.5	33	44 / 55	88 / 110
MPPT base Charge Controller							
Switching Element	IGBT						
Controller	32 Bit DSP Controlled						
Type of Charger	PWM with MPPT						
Grid Input							
Input Supply	415 V AC, 50 Hz (-20%, +15%), 3 Phase 4 Wire						
Active Filtering during load on mains (Load Harmonic corrections)	THDi up to 3% & Power Factor > 0.99						
Battery							
Battery Voltage	120 V			240 V			
Grid through Battery charging capacity (% KW Rating)	0 - 100%						
Inverter							
Switching Element	IGBT						
Control	32 Bit DSP Controlled						
Nominal Output Voltage, Frequency	415 V AC L-L, 50Hz, 3 Phase 4 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	< 2%						
Inverter peak efficiency (Ref. STD IEC 61683)	92%				94%		
Protection degree with open doors	IP20						
Colour	RAL 7016 Texture						
Dimension (WxDxH in mm)	600 x 800 x 1200			600 x 800 x 1750		1000 x 900 x 1750	
Cooling	Forced Air						
Galvanic Isolation	Inbuilt isolation transformer at inverter output						
Protection	Under/Over voltage for Input, Output, Array & Battery. Output overload, Short circuit, Over temperature, MCCB at Input, Output, Array & Battery path & Surge protection at Input, Output, Array & Battery path.						
Display Parameter	1. Array – Voltage, Current, Power, Temperature, 2. Battery – Voltage, Current, Power 3. Grid – Voltage, Current, Power, PF, 4. Output – Voltage, Current, Inv. H/S temp. 5. Statistics – Grid Import, Grid Export, Total Output, Daily Output Power, KWH						
Environment							
Temperature Operating	0 - 40° C						
Max. Relative humidity@ 25°C (non condensing)	Up to 95%						
Maximum Altitude above sea level without de-rating	1000 m (For higher altitude complies with IEC/EN 62040-3)						
Standard Compliance							
Testing	IEC 62040-3; IEC 61683; 60068-2						

Note : 100 KW available with 360V DC & 480V DC

► All specifications are subject to change ► Custom models available on request

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