

Sunbird 3000

Solar Inverter - 10 to 100 kW
Three Phase Output

Sunbird™ True bi-directional Solar Inverter for smarter, efficient and reliable Solar energy conversion

Neowatt, founded by a team of Power Electronic technocrats, having multifaceted experience of designing large capacity state-of-the-art UPS, Grid Tied Solar Inverter, Active Harmonic Filters etc. Neowatt intent to bring contemporary technology to produce power quality enhancement and energy saving solutions, for business and industry.

Sunbird off grid bi directional solar inverter is the new generation inverter, which has been designed specially for the solar application. Our long standing Two decade expertise in solar On Grid and Off grid inverter market has resulted in to a smart, more reliable and efficient Sunbird Solar Inverter.

Sunbird Solar inverter has many unparallel features, which gives best ROI for the user and helps in bringing the dream of Green planet more closer.

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





Neowatt

Sunbird
3000

Solar Inverter - 10 to 100 kW

Solar Inverter Three Phase Output

SPECIFICATIONS	System Rating (KW)	10	15	20	25	30	50	100	
	Photovoltaic Input								
	MPPT Range	165-235V			330-420V				
	Open Circuit Voltage	300V			600V				
	Maximum PV power recommended (KW)	11KW	16.5KW	22KW	27.5KW	33KW	55KW	110KW	
	MPPT base Charge Controller								
	Switching Element	IGBT							
	Controller	32 Bit DSP controlled							
	Type of Charger	PWM with MPPT							
	Grid Input								
Input Supply	415VAC , 50Hz (-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	120V	240V							
Grid through Battery charging capacity (%kw Rating)							0-100%		
Inverter									
Switching Element	IGBT								
Control	32 Bit DSP controlled								
Nominal Output Voltage, Frequency (Hz)	415V 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)				600x800x1200		600x800x1750	1000x900x1750		
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 & Surge protection at Input, Output, Array & Battery path.								
Display Parameter	1. Array - Voltage, Current, Power, Temperature, 2. Battery - Voltage, current, 3. Grid - Voltage, Current, 4. Output - Voltage, Current, Inv. H/S temp. Power								
Indications	MPPT Charger ON/OFF, Battery on Float, Battery on Boost, Battery low, Battery Charging/Discharging, Grid Switch ON, Inverter Switch ON, Grid ON, Load ON, Inverter ON								
Environment									
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									
Testing	IEC 62040-3 ; IEC 61683 ; 60068-2								

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

Neowatt Energy Solutions Co. Pvt. Ltd.

Near Army Sports Institute, Mundhwa Road, Pune - 411036. (INDIA)
Tel +91 20 2688 0775, 2688 0038 Fax +91 20 2688 0078
Email info@neowatt.co.in www.neowatt.co.in

Sales & Service network :

Mumbai, Bengaluru, Chennai, New Delhi, Pune,
Kolkata, Hyderabad, Raipur, Vadodara, Vijaywada, Vizag

Business Partner :