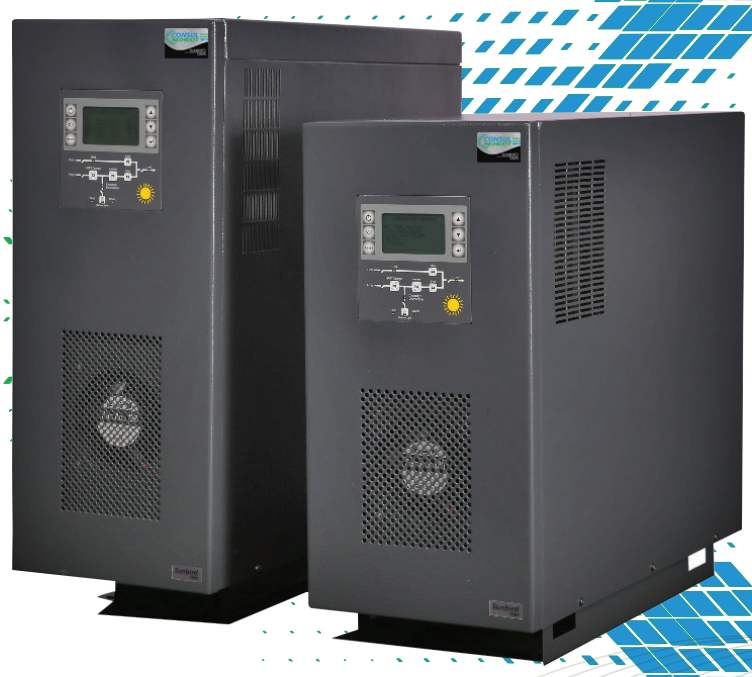
CONSUL NEOWATT Global Indian UPS

Solar Inverter
Single Phase Output



Special Features

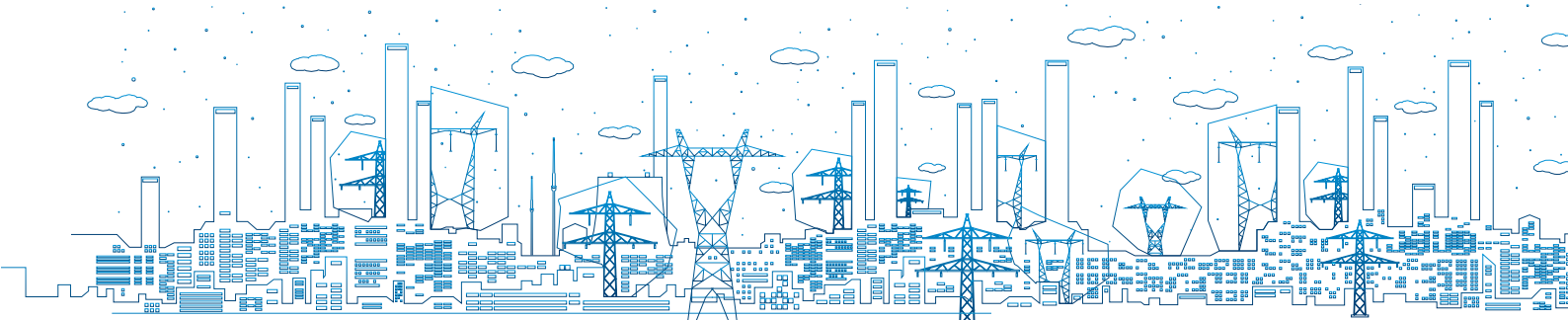
- Multiple 32 bit DSP controllers
- Battery independent operation
- True Bi-directional Solar Inverter
- Higher Array voltage capacity optionally available.
- Inbuilt charge controller
- MPPT - Achieved through Incremental Conductance Algorithms
- Battery charging through Grid up to 100%
- Selectable Priority feature (Solar-Battery-Grid) / (Solar-Grid- Battery)
- DC fan for low power consumption
- Inbuilt isolation transformer for galvanic isolation
- 128 x 64 Graphics display.
- Variable fan speed - for increased reliability, results into lesser dust suction inside the cabinet
- Net Metering Facility (Power Export) available (Model -1000E)

Sunbird 1000 / 1000E

1 to 12.5 kW

State-of-the-art R&D and Manufacturing facility

Service centres across India



Solar Inverter
Sunbird 1000 / 1000E - 1 to 12.5 kW
Single Phase Output

SPECIFICATIONS

MODEL	SUNBIRD 1000 / 1000E (Hybrid PCU)								
System Rating (KW)	**1KW**	**2KW**	**3KW**	**4KW**	**5KW**	**6KW**	**7.5KW**	**10KW**	**12.5KW**
Photovoltaic Input									
MPPT Voltage	65V - 130V (155V)			130V - 190V (250V)				165V-265V (315V)	
Maximum Input Current (A)	16A	34A	51A	34A	42A	51A	64A	69A	84A
Maximum PV power recommended (KW)	1.1KW	2.2KW	3.3KW	4.4KW	5.5KW	6.6KW	8.25KW	11KW	13.5KW
MPPT base Charge Controller									
Switching Element / Type of Charger	(MOSFET/IGBT) MPPT with PWM switching								
Grid Input									
Phases, Nominal Voltage, Range & Frequency	1 Phase 2 Wire230VAC (-20% , +15%), 50Hz								
Battery									
Battery Voltage	48V			96V			120V		
Battery Voltage	SMF/VRLA/Wet Lead Acid								
Output / Inverter									
Switching Element / Control	MOSFET/IGBT with 32 Bit DSP Space vector controlled								
Nominal Output Voltage ; Nominal Frequency (Hz)	230V AC L-N (110VAC optional); 50Hz (60 Hz optional)								
Voltage regulation & Stability in dynamic condition	± 2% (Complies with IEC/EN 62040-3,Class 1)								
Output Supply Phases (Output Waveform)	1Phase 2 Wire (Pure Sine wave)								
Load Power Factor	0.6 lag to 1 (Within KVA and KW rating)								
Output voltage distortion with 100% linear load	<2%								
Overload at nominal output voltage on array & battery together for 10 / 1 minutes resp.	125%/150%								
Environment									
Operating Temperature (Storage Temperature)	0-50 °C (0-70 °C)								
Location	Indoor (Free from corrosive gases & conductive dust)								
Max. Relative humidity @25°C	Up to 95% (non condensing)								
Max. Altitude above sea level without de-rating	1000 mtr (For higher altitude complies with IEC/EN 62040-3)								
Noise @ 1 meter (dBA ± 2dBA)	< 58dBA			< 62dBA					
Cooling	Forced Air								
Physical Characteristics									
Ingress Protection (IP) of cabinet / Colour	IP20 (IP21 optional) / RAL 7016 Texture -Anthracite Grey								
Cable Entry	Bottom								
DIMENSIONS (WxDxH in mm)									
Free standing, Floor Mounting, Modular Structure	250x620x550			250x640x680(Rev.4)				600x800x1200	
Display & User Interface									
Display Parameter (128X64 Graphics LCD & Mimic)	**Array/Battery/Grid -** Voltage, Current, Power **Output -** Voltage, Current, Inv. H/S temp, Power **Statics -** Grid kWH, PV kWH, O/P kWH, Battery charging, Discharging								
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								
Protection	Under/Over voltage for Grid, Output, Array & Battery. Array & Battery reverse polarity. Output overload, short circuit, Over temperature, MCB at Grid, Output, Array & Battery path, Surge Protection for Grid and Array . Inbuilt isolation transformer at inverter output								
Audible Alarm / Data log & Events/ Communication	For Fault condition Built in Alarm log 240 numbers and Data log 268 numbers (expandable with SD card optional); Ethernet Based(RJ 45)/ RS232/ RMS with GPRS								
Reference Standards									
Efficiency : **IEC 61683** ; Environmental Testing : **IEC 60068**; Inverter Testing: **IEC 62040 part III** Active filter function (for 1000E model) :Complies to **IEEE 519**; Islanding Certification (for 1000E model) :**IEC 62116**									

*Specification are subject to change

Contact:

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CNPS/Sunbird 1000/1000E/0917/VER-1