

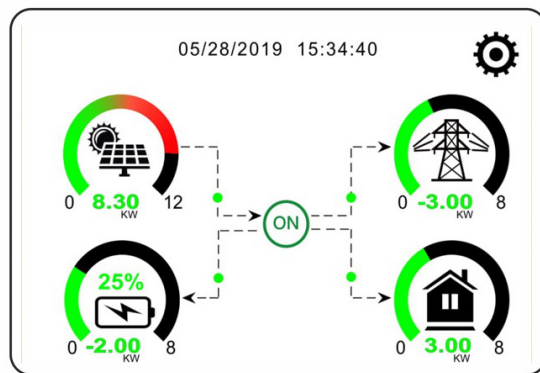
# Smart Hybrid Inverter : 3KW to 8KW

## 5<sup>th</sup> Generation Technology

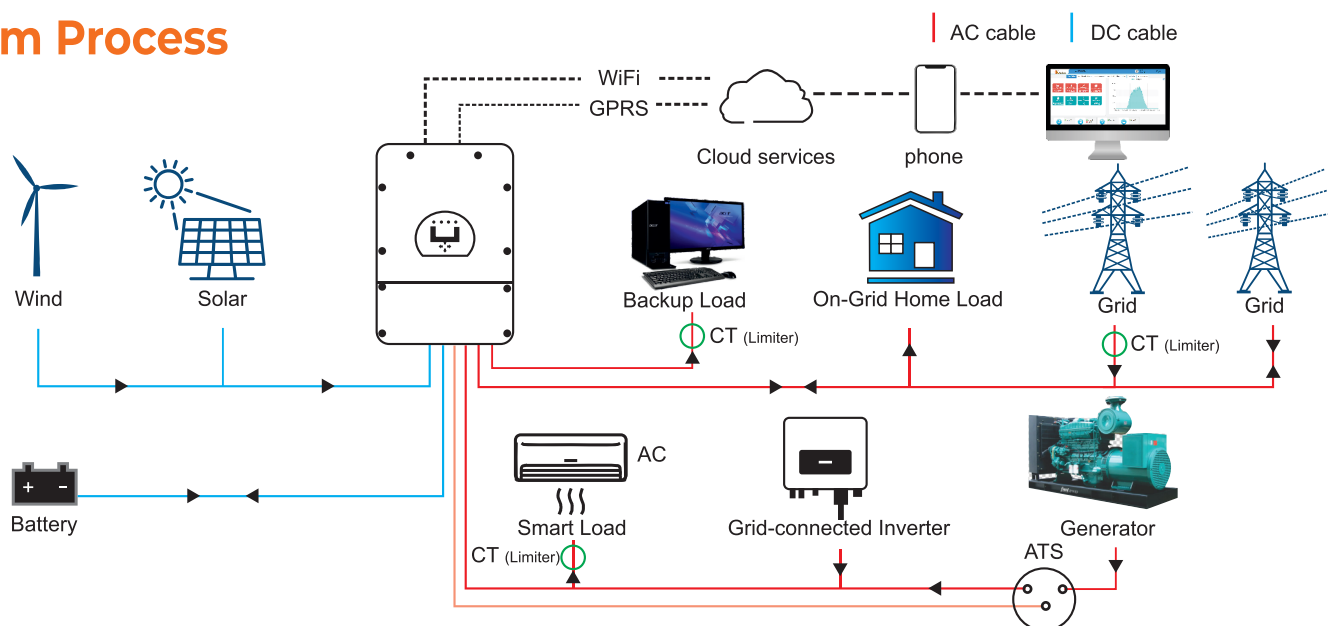
India's most compact Highly intelligent 5G Smart Hybrid Inverter ranging from 3 to 8 KVA.

Ideal solution for BLACK-OUT & BROWN-OUTS with GRID Exports.

- Programmable supply priority for PV, Battery & Grid.
- Battery Management System (BMS) to protect & enhance the battery life. (LION/VRLA)
- Facility for Back up + Export to the grid
- Can enable to zero export/ Reverse power Limit to grid.
- Grid Peak shaving mode- max limit reducing grid MD.
- Work like UPS with ultra-low change over time.
- Also compatible with DG with ATS operation & special Loads like AC/water heater etc.
- Excess power intelligence mode-SMART LOAD
- Advanced integration can be used with with Micro-inverter/Grid-Tie Inverter
- Reduces the entire energy bill.
- User friendly Remote Monitoring via WIFI/GPRS/LAN



## System Process



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## Technical Specification

Smart Hybrid - 3KW - 8KW				
Model	3KW	5KW	6KW	8KW
<b>Battery Input Data</b>				
Battery Type	Lead-acid or Li-Ion			
Battery Voltage Range(V)	40v-60V			
Max. Charging Current(A)	90A	125A	125A	175A
Max.Dis-Charging Current(A)	90A	125A	125A	175A
Charging Curve	3 Stages/Equilization			
External Temperature Sensor	Optional			
Charging Strategy For Li-Ion Battery	Self - Adaption to BMS			
<b>PV String Input Data</b>				
Max. DC Input Power(W)	3960W	6000W	6000W	8400W
Max. DC Input Voltage(V)	500V			
MPPT Range(V)	150-500V			125V-425V
Start-Up Voltage(V)	150V			
Max-Input Current(A)	11A+11A			18A+18A
No. of MPPT Trackers	2			
No. of Strings Per MPPT Tracker	1 / 1			2 / 1
<b>AC Output Data</b>				
Rated AC output & UPS Power(W)	3600W	5000W	5000W	7600W
Peak Power(off grid)	2 Times of rated power, 2 S			1.5 Times of rated power, 10 S
Max AC Current(A)	20.8A	25A	25A	33A
Output Frequency & Voltage	50/60Hz; 220/230/240Vac(single phase)			50/60Hz; 230Vac (single phase)
Grid Type	Single Phase			Split Phase / Single Phase
Current Harmonic Distortion	THD<3%(Linear load) < 1.5%			
<b>Efficiency</b>				
Max Efficiency	97.60%			
Euro Efficiency	96.50%			97%
MPPT Efficiency	99.90%			
<b>Certifications &amp; Standards</b>				
Grid Regulation	VDE-ARN-4105, VDE 0126, AS4777, NRS2017, G98, G99, EN50438			VDE-ARN 4105
Safety Regulation	IEC62109 - 1&2			IEC62109 - 1&2, IEC62040-1
EMC	EN61000-6-1, EN61000-6-3			
<b>General Data</b>				
Operating Temperature Range°C	-25~60°C, 45°C Derating			
Cooling	Fan			
Noise(dB)	<30			
Communication with BMS	RS485; CAN			
Weight(Kg)	20.5KG			32KG
Size (Length*Width*Height mm)	580*330*217mm			680*420*233mm
Protection Degree	IP65			
Installation Style	Wall Mounted			
Warranty	5 Years			
<b>Protection</b>	<b>Integrated</b> PV Input Lightning Protection, Anti-Islanding Protection, PV String Input Reverse Polarity Protection, Insulation Residual Detection, Residual Current Monitoring Unit, Output Over current protection, Output Shorted Protection, Output over Voltage Protection, PV Arc Fault Detection ( For 8KW only ( Except European type))			