

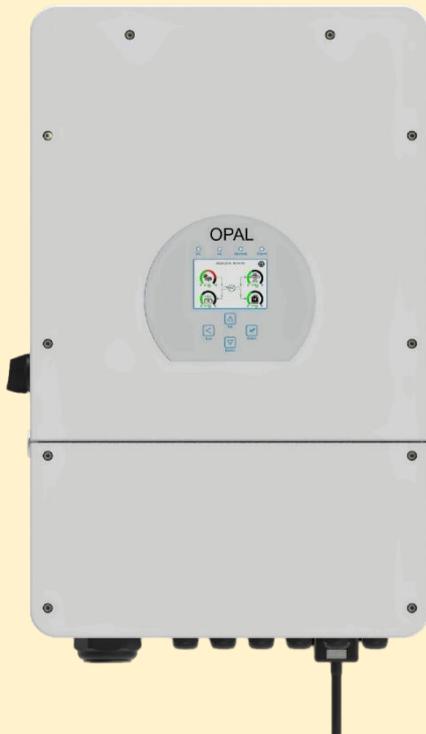
DATA SHEET

SINGLE PHASE HYBRID INVERTER



This Energy Storage System comprises of either a 8.0kW hybrid single phase hybrid inverter with a 4.8kWh battery pack or 2 battery packs expandable to even higher capacity if required. Outdoor enclosure will be provided

Opal-8K-1P-EU



FEATURES OF HYBRID INVERTER

- LCD** Colourful touch LCD, IP65 protection degree
- 4** 4ms fast transfer from on-grid to off-grid mode, ensuring no disruption to any loads
- 6** 6 time period setting for battery charging/discharging
- 16** The hybrid inverters can be expanded up to 16 inverters
- 120** Able to take high DC charge & discharge current
-  Frequency droop control for off grid micro-grid application
-  Able to support storing energy from diesel generator
-  Suitable for both DC or AC couple to retrofit existing solar system
-  Unique Smart Load application and Grid peak shaving function
-  Easy access to system via either PC or phone App



Opal residential monitoring solution take great care to ensure that your PV system is in excellent operation throughout its entire life-cycle. This monitoring solution offer you details information of your power generating plant including daily, monthly, yearly energy and total energy etc, through wireless communication with your router to the internet by a smart WIFI plug. User can easily access to the monitoring page via PC web or phone APP. The cloud data will be kept in Europe and Singapore



Technical Specification

Hybrid Inverter

Model	Opal-8K-1P-EU
PV Input DC Rating	
No of MPPT for solar input	Two
Max DC input Power	6,500Wp
PV DC input MPPT voltage range	125-425V
Start-up DC Voltage	150V
PV Input Current per MPPT	22A +22A
Battery Voltage range	40V to 60V
DC Max. Charging/ Discharging	190A
AC Rating	
Rated AC Output and UPS power	8,000W
Max. Output AC Output power	8,800W
Off-Grid Peak AC Power	16,000W for 10 sec
AC Output rated Current	35.0A
Max. AC Current	40.0A
Max. Continuous AC pass-through	50.0A
Output Voltage frequency	230V single phase 50/60Hz
Current harmonic Distortion	THD<3% (Linear Load <1.5%)
Power Factor	0.8 leading to 0.8 lagging
Efficiency	
Max Efficiency	97.6%
Euro Efficiency	97.0%
MPPT Efficiency	99.9%
Protections	
PV input lightning Protection	Integrated
Anti-Islanding protection	Integrated
PV String Input Reverse Polarity Protection	Integrated
Insulation Resistor Detection	Integrated
Residual Current monitoring Unit	Integrated
Output Over Current Protection	Integrated
Output Short Circuit Protection	Integrated
Output Over Voltage Protection	Integrated
Surge Protection	DC Type II/ AC Type II
UPS Transfer Time	4mSec
Certifications and Standards	
Grid Regulation	UNE217002, IEC61727, IEC62116, VDE 0126-1-1
Safety standard/ EMC	IEC62109-1/2, IEC61000-6-1/2/3/4
General	
Operating Temperature Range °C	-45 to 60°C, >45°C derating
Cooling	SMART COOLING
Elevation	<3000 M
Noise (DB)	<30 DB
Humidity	5% to 95% (Non-Condensing)
Communication with BMS	RS485/ CAN
Protection Degree	IP65
Inverter Weight (Kg)	32.0 Kg
Inverter Dimension (mm)	420W x 670H x 233D mm (Wall mounted)
Warranty	5 years (Standard) + 5 years (Optional)