

# “Power Your Home and Invest Today”

**OPAL 6KW/8KW/10KW/12KW Three Phase Hybrid Inverter**



# Technical specification

## Three Phase Hybrid Inverter



Model	Opal-6K-3P-EU	Opal-8K-3P-EU	Opal-10K-3P-EU	Opal-12K-3P-EU
<b>PV Input DC Rating</b>				
No of MPPT for solar input	2/1 + 1		2/2 + 1	
Max DC input Power (Wp)	7,800Wp	10,400Wp	13,000Wp	15,600Wp
Rated PV Input Voltage (V)	550V (150V to 800V)			
PV MPPT voltage range (V)	200V to 650V			
Start-up DC Voltage (V)	150			
PV Input Current per MPPT (A)	13A + 13A		26A + 13A	
Battery Voltage range (V)	40V to 60V			
DC Max. Charging/ Discharging (A)	150A	190A	210A	240A
<b>AC Rating</b>				
Rated AC Output and UPS power	6,000W	8,000W	10,000W	12,000W
Max. Output AC Output power	6,600W	8,800W	11,000W	13,200W
Off-Grid Peak AC Power	12,000W for 10s	16,000W for 10s	20,000W for 10s	24,000W for 10s
AC Output rated Current	9.1A	12.1A	15.2A	18.2A
Max. AC Current	13.6A	18.2A	22.7A	27.3A
Max. Continuous AC pass-through	45.0A			
Output Voltage frequency	3L/N/PE 220/380Vac 230/400Vac, three phase 50/60Hz			
Current harmonic Distortion	THD<3% (Linear Load <1.5%)			
Power Factor	0.8 leading to 0.8 lagging			
<b>Efficiency</b>				
Max Efficiency	97.60%			
Euro Efficiency	97.00%			
MPPT Efficiency	99.90%			
<b>Protections</b>				
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			
<b>Certifications and Standards</b>				
Grid Regulation	CEI 0-21, UNE217002, IEC61727, IEC62116, VDE 4105, VDE 0126-1-1			
Safety standard/ EMC	IEC62109-1/-2, IEC61000-6-1/2/3/4			
<b>General</b>				
Operating Temperature Range °C	-45 to 60°C, >45°C derating			
Cooling	SMART COOLING			
Elevation	<3000 M			
Noise (DB)	<45 DB			
Humidity	5% to 95% (Non-Condensing)			
Communication with BMS	RS485/CAN			
Protection Degree	IP65			
Inverter Weight (Kg)	33.6 Kg			
Inverter Dimension (mm)	422W x 699.3H x 279D mm (Wall mounted)			
Warranty	5 years (Standard) + 5 years (Optional)			