

# SMART HYBRID INVERTER DATA SHEET

Technical specification	PhG-P5K0LNA-M	PhG-P6K0LNA-M	PhG-P7K6LNA-M	PhG-P8K0LNA-M
<b>PV Input</b>				
Max. DC input power(STC)	7500W	9000W	12000W	12000W
Max. DC system voltage(V)	600			
MPPT operating voltage range(V)	120~500			
NO. of MPPT Tracker/String	4/1			
Max. DC input current per MPPT(A)	14			
Max. Short-circuit Current per MPPT(A)	22			
<b>Battery Input/Output</b>				
Nominal voltage(V)	48			
Battery voltage range(V)	40~58			
Max. charge Voltage(V)	58			
Max. charge/discharge Current(A)	120/120	135/135	190/190	190/190
Battery type	Lithium Iron Phosphate and Lead Acid Battery			
Charging Strategy for Li-Ion Battery	Self-adaption to BMS			
<b>AC output (On-Grid)</b>				
Rated Output power(VA)	5000	6000	7600	8000
Max. Output power(VA)	5500	6600	8400	8800
Rated Output current(A)	20.8	25.0	31.7	33.3
Max. Output current(A)@240V	22.9	27.5	35.0	36.7
Rated Voltage L-N/L1-L2	120/240V (split-phase)			
Frequency(Hz)	50 / 60			
Power factor	0.99, 0.8 leading~0.8 lagging			
THDi	<2%			
<b>EPS output (Back-up)</b>				
Rated Output power(VA)	5000	6000	7600	8000
Max. Output power(VA)	5500	6600	8400	8800
Rated Output current(A)	20.8	25.0	31.7	33.3
Max. Output current(A)@240V	22.9	27.5	35.0	36.7
Rated Voltage L-N/L1-L2	120/240V (split-phase)			
Frequency(Hz)	50 / 60			
Automatic switching time(ms)	< 20			
THDv	< 2%			
Overload capability	125%, 60S / 150%, 1S			
<b>General</b>				
Max. efficiency	98.2%			
CEC Efficiency	97.2% (Peak 97.8%)			
Ingress Protection	IP65 / NEMA 3R			
Noise emission(dB)	< 38			
Dimensions W * D * H(inch)	16.93*8.66*27.95 (430*220*710mm)			
Weight(lb)	90 (41kg)			
Operating temperature range	-25 ~ + 60 °C (-13 °F ~ 140 °F)			
Relative operating humidity	0 %RH ~ 95 %RH			
Cooling	Natural Convection			
Max. operating altitude	13120 ft /4000m (Derating above 6560 ft/ 2000m)			
Display	LCD			
Communication With BMS/Meter/EMS	RS485, CAN			
Supported communication interface	RS485, WIFI, 4G (optional)			
Limited Warranty	10 years			
<b>Standard Compliance</b>				
Safety	UL1741, UL1741SA, UL1699B, UL1998, CSA C22.2			
Grid Connection Standards	IEEE 1547, Rules 14H, Rule 21			
Emissions	FCC Part15 Class B			

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# PHASEGREEN

SOLAR PLUS ENERGY STORAGE SOLUTIONS & PRODUCTS

## SMART HYBRID INVERTER DATA SHEET



### PHG-P SERIES /Split phase

- 5KW,6KW,7.6KW,8KW
- For Grid Scenario of 120V/240V/208V/230V
- 4 PV Strings Input
- Diesel Generator Input

- IP65
- 10 10 years
- Plug and play
- Certification: IEC, EN, UL, FCC, CEC
- LCD display

## SMART ENERGY STORAGE SYSTEM

### PHG ESS SERIES / LV Battery

**Rotary Disconnect Switch**  
Flexible, safe and reliable operation

**Stackable Design**  
Innovative full-hidden wiring design, incorporating design appearance aesthetics

Friendly capacity options;  
Easy to install;  
Excellent low temp. performance (Optional);  
Smart Battery EMS;

**Smart Energy Management**  
Digital battery management system, managing energy at a glance

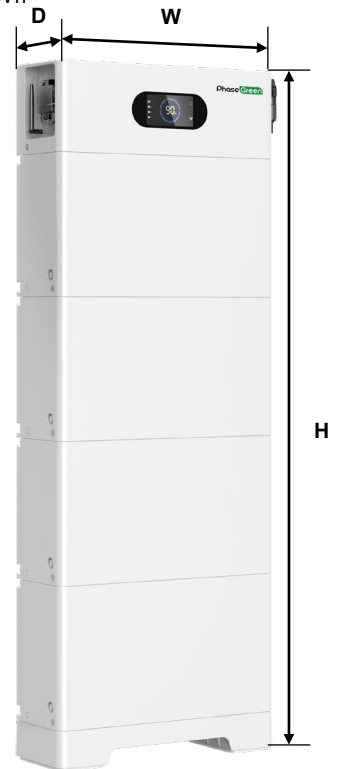
**Modular Design**  
Unique modular design, installation by two people in 30 minutes, maintenance-free

- IP55
- 20°C to 50°C
- Stack & play installation
- 5 years product warranty, 10 years performance warranty
- Capacity 5-20kWh



## SMART ENERGY STORAGE SYSTEM DATA SHEET

Model	PhG-ESS-5L-S	PhG-ESS-10L-S	PhG-ESS-15L-S	PhG-ESS-20L-S
<b>Electrical characteristics</b>				
Nominal energy (kWh)	5	10	15	20
Usable energy 90%DOD (kWh)	4.5	9.0	13.5	18.0
Rated voltage (V)	51.2	51.2	51.2	51.2
Rated charge/discharge current (A)	50/50	100/100	150/150	200/200
Max. charge/discharge current (A)	100/100	180/180	200/200	200/200
Max. continuous discharge rate(kW)	5	9	10	10
Voltage range(V)	44.8~55.2	44.8~55.2	44.8~55.2	44.8~55.2
Roundtrip efficiency	95%	95%	95%	95%
Dimensions W*H*D	573*597*189mm (22.6*23.5*7.4in)	573*912*189mm (22.6*35.9*7.4in)	573*1227*189mm (22.6*48.3*7.4in)	573*1542*189mm (22.6*60.7*7.4in)
Weight	65kg (143lb)	115kg (254lb)	165kg (364lb)	215kg (474lb)
Communication interface	CAN/RS485/WIFI			
DC disconnect	Circuit breaker, 250A, 48V rating			
Connection method	Quick plug and unplug terminals			
User interface	Display battery running status, SOC, alarm information, WIFI status, heater status, etc.			
Protection features	Charging over-voltage protection, discharge under-voltage Protection features protection, over current protection, over temperature protection, short circuit protection, etc.			
Scalability	Max. 3 x 20kWh systems in parallel, expandable capacity of 60kWh			
<b>Operating conditions</b>				
Installation location	Outdoor or indoor			
Charging temperature	-10°C~50°C (14°F~122°F)			
Discharging temperature	-20°C~50°C (-4°F~122°F)			
Storage temperature	-30°~60°C (-22°F~140°F)			
Humidity	10% to 95%, non condensation			
Enclosure rating	IP55			
Altitude	2000m (6562 ft)			
Cooling	Natural convection			
Certification	IEC/EN62619, EN/IEC61000, EN62311, EN300328, EN301489, UL1973, FCC part15B, UL9540, UL1642, UN38.3, MSDS			
Limited warranty	5 years product warranty, 10 years performance warranty			



\*If the picture is different from the product, the product shall prevail