PH SERIES

Inverter Charger

PH3.0L / PH2.0L / PH1.6L / PH1.2L	12VDC 3kW / 2kW / 1.6kW / 1.2kW
PH3.0M / PH2.0M	24VDC 3kW / 2kW

200A Max Charging Current

4.0 / 5.2kg



FEATURES

- High Integration: Combines inverter, AC charger, and transfer switch in one unit
- Supports 200% peak power for 2s (max. 6kW)
- High efficiency up to 94.3%, 92% at full load
- Power control and power assist function to compose the generator hybrid system
- Reverts to bypass mode once grid power stabilizes
- Ultra-quiet operation ≤ 55 dB
- Supports dual charging outputs, delivering up to 200A to the auxiliary battery and 3A to the starter battery
- Activates charging when shore power is connected or via battery voltage signals (compatible with TBB M-series batteries)
- Wide Compatibility: Works with lithium/lead-acid batteries
- Built-in RCD safety switch provides leakage and overcurrent protection for safer AC operation
- Built-in Bluetooth for convenient app monitoring and control

Plug & Play AC Connectors

Quick WAGO connectors ensure fast, reliable installation and prevent mismating.

PH3.0L / PH3.0M:

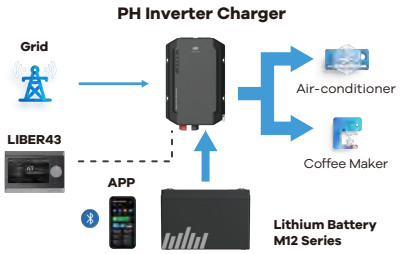


PH2.0L / PH1.6L / PH1.2L / PH2.0M:



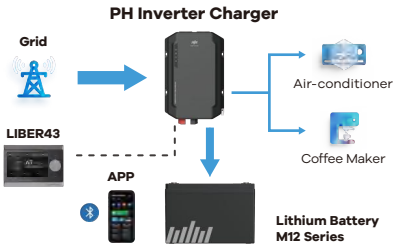
POWER ASSIST

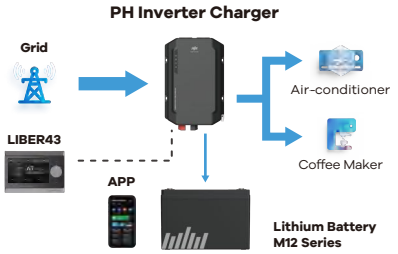
The PH inverter charger automatically supplements limited shore power with battery power to keep high power loads running without interruption.



POWER CONTROL

When shore power is limited, the PH inverter charger automatically reduces the charging current to prevent the circuit breaker from tripping.





Model NO.	PH3.0L PH3.0M	PH2.0L PH2.0M	PH1.6L	PH1.2L
Inverter Mode				
Rated Battery Voltage (V)	12 / 24		12	
Input Voltage Range (± 0.2V)	9 ~ 15 / 18 ~ 30		9 ~ 15	
Zero Load Power (W)	≤ 24 / ≤ 36		≤ 24	
ECO Mode Power (W)	≤ 9.1			
Standby Power (W)	≤ 2.6 / ≤ 10.4		≤ 2.6	
Cont. Output @ 25℃ (kVA / kW)	3.0	2.0	1.6	1.2
Cont. Output @ 40℃ (kW)	2.4	1.6	1.3	1.0
Cont. Output @ 60℃ (kW)	2.0	1.3	1.0	0.8
Peak Power (2s) (kW)	6.0	4.0	3.2	2.4
AC Output (Vac, Hz)	230 / 240 ± 3%, 50 / 60 ± 1%			
Inverter Efficiency (%)	Max: 94.3, Full load: 92			
Output Waveform	Pure sine wave (THD < 3% @ 13V, resistive load)			
RCD Safety Switch	25A / 30mA			
Charger Mode				
AC Input (Vac, Hz)	176 ~ 264, 45 ~ 65			
AC Charging Current (A)	13 @ 230Vac	8.7 @ 230Vac	7 @ 230Vac	5.2 @ 230Vac
Power Factor Correction (PFC)	≥ 0.99			
Default Charging Voltage (V)	14.2 @ LFP / 28.4 @ LFP		14.2V @ LFP	
Aux. Bat Max. Charging Current (A)	200 / 100	133 / 66	105	80
Starter Bat Max. Charging Current (A)	3 / None		3	
Battery Temperature Sensor	Optional			
Others				
Programmable Relay	3A @ 28Vdc, 3A @ 250Vac			
Operating Temperature (℃)	-30 ~ 65			
Cooling Method	Forced air cooling			
Noise (dB)	≤ 55			
Protection Level	IP20			
Dimensions (mm)	430.15 × 277.5 × 79.3	382.35 × 235.5 × 84.8		
Weight (kg)	5.2	4		
Safety Standards	EN IEC62477-1			
EMC Standards	EN61000-6-4 , EN61000-6-2 , ECE R10			