PPL SERIES

Pure Sine Wave
Inverter/Charger

PPL rack mount inverter charger, is specifically designed and produced for boardcast vehicle, telecom system or other special vehicles .

High efficiency, high anti-surge, multi-stage charging, auto switch between AC and DC system to give continuous stable pure sine wave AC power to device. PPL combines CAN-BUS communication port and main battery charger. It is able to satisfy various requirement of monitoring and interactive control.

By the panel on inverter customize the parameters for specific application freely.

APPLICATIONS

special vehicle

REMOTE CONTROLLER

PTM-12

FEATURES

- CAN-BUS+RS485 communication
- Low THD ensure sensitive loads working stably
- MAX. 90A charge current for AGM/GEL/Flooded/Lithium batteries
- High working temperature tolerance for -20~45°C at 100% continuous output
- Battery temperature compensation for energizing battery in cold environment ;Control battery in safe charge regulation in high temperature
- Ultra-low idle consumption to save energy
- Low-frequency technology for inductive loads
- Auto charge with qualified AC input without turning on
- Auto GEN start/stop

PROTECTIONS

- Input/Output over current
- AC input over/low voltage
- Battery over/low voltage
- Output overload
- Short circuit
- Over temperature

WORKING MODE

- **Parking Mode, with AC input, inverter OFF**

  When vehicle is parked, with shore or Gen connected, inverter is OFF.
  Inverter works as the battery charger will start work automatically, charge both start battery @3Adc and house battery @Max. 90Adc.
  No AC bypass output from Inverter.

- **Parking Mode, with AC input, inverter ON**

  When vehicle is parked, with shore or Gen connected, inverter is ON.
  Inverter bypass to AC loads by Shore/Gen, no more discharge battery. At the same time give charge to both start battery @3Adc and house battery @Max. 90Adc.

- **Cruise Mode, no AC input, inverter ON**

  Vehicle is on going, no AC input, inverter is ON.
  Inverter convert DC power from battery to be AC power, to provide stable AC power to appliance in vehicle. Can work at -20~50°C environment continuously without power loss.

RACK-MOUNT INVERTER/CHARGER



	PPL1000	PPL2000	PPL3000
Rated Power (-20~45°C)	1000 W	2000 W	3000 W
DC Input			
Rated DC Voltage	12VDC (10.0~16.0VDC)（*2 for 24V, *4 for 48V）		
Max. Charge Current	35A-12V; 20A-24V	70A-12V; 30A-24V; 15A-48V	80A-12V; 40A-24V; 25A-48V
Battery Type	Lead-Acid/ Gel/ LiFePO4	Lead-Acid/ Gel/ LiFePO4	Lead-Acid/ Gel/ LiFePO4
AC Input			
AC Input Range	170-275VAC	170-275VAC	170-275VAC
Input Frequency	45-65Hz	45-65Hz	45-65Hz
AC Output			
Output Voltage	230VAC±5%	230VAC±5%	230VAC±5%
Output Frequency	60/50Hz±0.3	60/50Hz±0.3	60/50Hz±0.3
Output Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
AC/Battery Switch Time	< 8ms	< 8ms	< 8ms
Efficiency	>86%	>86%	>85%
Overload Ability	105~120% 10s/ >120% 3s/ >150% 1s		
Max. Bypass	1800W	3600W	4400W
Protection	Battery low/over voltage, AC input low/over voltage, AC output short circuit, Over-temp, Overload		
Power Factor	0.8-1	0.8-1	0.8-1
Idle Power (save mode)	<5W	<5W	<5W
Protection			
Low-volt Alarm/Cutout	10.0V / 10.5V（*2 for 24V, *4 for 48V）(configurable)		
Overload	AC output shutdown, manual restart inverter after removing fault		
Short Circuit	AC output shutdown, manual restart inverter after removing fault		
DC Over Voltage	16.5V（*2 for 24V, *4 for 48V）		
General			
Working Temp	-10~45°C	-10~45°C	-10~45°C
Storage Temp	-20~70°C	-20~70°C	-20~70°C
Work/Storage Humidity	0-90% No condensation	0-90% No condensation	0-90% No condensation
Dimension (W*D*H)	482*400*132 mm	482*400*176 mm	482*400*176 mm

RACK-MOUNT INVERTER/CHARGER



	PPL4000	PPL5000	PPL6000
Rated Power (-20~45°C)	4000 W	5000 W	6000 W
DC Input			
Rated DC Voltage	24VDC (20.0~32.0VDC) (*2 for 48V)		
Max. Charge Current	50A-24V; 30A-48V	70A-24V; 40A-48V	75A-24V; 50A-48V
Battery Type	Lead-Acid/ Gel/ LiFePO4	Lead-Acid/ Gel/ LiFePO4	Lead-Acid/ Gel/ LiFePO4
AC Input			
AC Input Range	170-275VAC	170-275VAC	170-275VAC
Input Frequency	45-65Hz	45-65Hz	45-65Hz
AC Output			
Output Voltage	230VAC±5%	230VAC±5%	230VAC±5%
Output Frequency	60/50Hz±0.3	60/50Hz±0.3	60/50Hz±0.3
Output Waveform	Pure Sine Wave	Pure Sine Wave	Pure Sine Wave
AC/Battery Switch Time	< 8ms	< 8ms	< 8ms
Efficiency	>86%	>86%	>85%
Overload Ability	105~120% 10s/ >120% 3s/ >150% 1s		
Max. Bypass	4400W	6600W	6600W
Protection	Battery low/over voltage, AC input low/over voltage, AC output short circuit, Over-temp, Overload		
Power Factor	0.8-1	0.8-1	0.8-1
Idle Power (save mode)	<5W	<5W	<5W
Protection			
Low-volt Alarm/Cutout	20.0V / 21.0V (*2 for 48V)		
Overload	AC output shutdown, manual restart inverter after removing fault		
Short Circuit	AC output shutdown, manual restart inverter after removing fault		
DC Over Voltage	33.0V (*2 for 48V)		
General			
Working Temp	-10~45°C	-10~45°C	-10~45°C
Storage Temp	-20~70°C	-20~70°C	-20~70°C
Work/Storage Humidity	0-90% No condensation	0-90% No condensation	0-90% No condensation
Dimension (W*D*H)	482*400*176 mm	482*400*176 mm	482*400*176 mm