



Rugged

HPOWER has been designed to cope with the toughest conditions for the professional and recreational industries.



3 isolated battery banks

Simultaneous recharge of 3 independent battery banks, without any current limitation.



Worldwide use

Automatic detection of power supply network, from 90 to 265VAC and from 47 to 65Hz. You do not have to care about the AC power grid and genset voltage.



Easy installation

Because of its HF technology HPOWER is very light (3 or 4 times lighter than low frequency technology).



Parallel operation

The chargers can be mounted in parallel to increase the charging power: up to 4 units (balancing through Master-Slave function).



No derating

Chargers have full charge up to +50°C (122°F) with no loss, resistant to harsh environment.



BV certified version

With integrated touch-screen control panel and relays board (option).



5-stage charging profile

- **Boost:** charges batteries to 80% of full charge
- **Absorption:** slowly completes remaining charge to 100%
- **Floating:** maintains battery charge
- **Automatic refresh:** prevents sulphation and revitalizes batteries, selectable by keypad pushbutton
- **Reboost:** new automatic Boost phase if DC consumers and the state of batteries so require.

A regulated DC power-supply mode is also available and YPOWER+ chargers can also be used as high-voltage DC-DC converters with input ranging from 121 to 375VDC.



Adaptive charging

Custom-made and simultaneous recharge of 3 or 4 battery banks. YPOWER+ chargers can be connected to various types of batteries simultaneously:

- Opened classic lead
- Sealed, gel or AGM
- Spiral sealed
- Lithium Iron Phosphate (LiFePO4) with BMS



Remote control

The chargers are fitted with a CAN-Bus and a Bluetooth interface as standard. Connection to an NMEA network is also available through an optional adaptor, refer to charger's options page.

NMEA

Part Number	HPO12-90
Model	12V-90A
Recommended battery bank*	600 - 1200Ah
Input	
AC Voltage	From 90 to 265VAC single-phase automatic
DC Voltage	From 121 to 346VDC
Frequency	From 47 to 65Hz automatic
Input current consumption 230/115VAC	6,0A/16,0A
Recommended power for a generator	1600W
Power factor	1
Efficiency	87% typical
Removable input fuses	2 x 20A 250VAC (6,3 x 32) (F1/F2)
Output	
Number of battery banks	3 (including one for the engine battery) : +BAT E, +BAT 1 et +BAT 2 (integrated isolator), 1 negative -BAT. Each bank can be used individually and deliver the rated current
Connection on threaded rods	M6
Rated current / power	90A/1282W
Charging profile	IU or IUoU through internal dip switches (Boost, Absorption and Floating – factory setting). Selectable automatic Refresh
Battery type	Lead-sealed as factory setting - Gel, AGM, Calcium Lead, Lithium, DC power-supply mode, etc. Specific request on demand
Boost voltage	14,4VDC as factory setting for Lead-sealed
Floating voltage	13,8VDC as factory setting for Lead-sealed
Regulation tolerance before output diode and fuse	<1 % (at rated conditions)
Peak to peak ripple	<1 % (at rated conditions)
Automotive fuse in the minus pole -BAT	4 x 30A/32V
Environment	
Cooling	Electric fan controlled in temperature and current
Sound level	< 50 dB SPL at 1m
Operating temperature	Rated charge from -20°C (-4°F) to +50°C (122°F), derating above 50°C (122°F) Automatic charger switch off above 60°C (140°F); automatic restart when temperature decreases
Storage T°	From -20°C to +70°C (-4°F to +158°F)
Relative humidity	Up to 96 % without condensation
Casing	
Material	Painted Aluminium
Dimensions (length, height, depth)	270 x 360 x 130 mm (10,6 x 14,1,7 x 5,1,1 in)
Weight	6,8 kg (15 lbs)
Fixing screw (wall)	4 x M6 round screws
Protection factor	IP23
PCB protection	Water-repellent varnish (marine environment)
Standards	
CE / EMC	EN61204-3
CE / Security	EN60335-2-29
Protections	
Against leaking input surge by VDR (Voltage Dependant Resistor) - Not covered by warranty / Against output polarity reversal by fuse rupture Against short-circuit and surge / Against abnormal overheating by cutting off the charger	
Communication	
CAN-Bus (NMEA on option)	
Options	
Temperature probe	Output voltage compensation for 12V : -18mV/°C (ref: 2.8m: STP-UNI-2.8 or 5m: STP-UNI-5.0)
Parallel mounting	KIT-HPO-LINK : up to 4 units with real time balancing feature
2.4" remote color touch-screen control panel	UNI-DISPLAY-R

* Overall battery capacity recommended for lead-type batteries, C/10. For Lithium batteries, C/3, consult us if needed.

Part Number	HPO24-45	HPO24-60	HPO24-80	HPO24-100
Model	24V-45A	24V-60A	24V-80A	24V-100A
Recommended battery bank*	300 - 600Ah	500 - 800Ah	700 - 1000Ah	800 - 1300Ah
Input				
AC Voltage	From 90 to 265VAC single-phase automatic			
DC Voltage	From 121 to 346VDC			
Frequency	From 47 to 65Hz automatic			
Input current consumption 230/115VAC	6,0A/16,0A	9,0A/20,0A	11,0A/20,0A	15,0A/30,0A
Recommended power for a generator	1600W	2100W	2800W	3520W
Power factor	1			
Efficiency	87% typical			
Removable input fuses	2 x 20A 250VAC (6,3 x 32)	2 x 25A 250VAC (6,3 x 32)		2 x 32A 250VAC (6,3 x 32)
Output				
Number of battery banks	3 (including one for the engine battery) : +BAT E, +BAT 1 et +BAT 2 (integrated isolator), 1 negative -BAT. Each bank can be used individually and deliver the rated current			
Connection on threaded rods	M6			
Rated current / power	45A/1282W	60A/1710W	80A/2280W	100A/2850W
Charging profile	IU or IUoU through internal dip switches (Boost, Absorption and Floating – factory setting). Selectable automatic Refresh			
Battery type	Lead-sealed as factory setting - Gel, AGM, Calcium Lead, Lithium, DC power-supply mode, etc. Specific request on demand			
Boost voltage	28,8VDC as factory setting for Lead-sealed			
Floating voltage	27,6VDC as factory setting for Lead-sealed			
Regulation tolerance before output diode and fuse	< 1 % (at rated conditions)			
Peak to peak ripple	< 1 % (at rated conditions)			
Automotive fuse in the minus pole -BAT	2 x 30A/32V	3 x 25A/32V	4 x 25A/32V	4 x 30A/32V
Environment				
Cooling	Electric fan controlled in temperature and current			
Sound level	< 50 dB SPL at 1m			
Operating temperature	Rated charge from -20°C (-4°F) to +50°C (122°F), derating above 50°C (122°F) Automatic charger switch off above 60°C (140°F); automatic restart when temperature decreases			
Storage T°	From -20°C to +70°C (-4°F to +158°F)			
Relative humidity	Up to 96 % without condensation			
Casing				
Material	Painted Aluminium			
Dimensions (length, height, depth)	270 x 360 x 130 mm (106 x 141,7 x 51,1 in)			270x410x130mm (106 x 161,4x51,1in)
Weight	6,8 kg (15 lbs)			9,0 kg (19,8 lbs)
Fixing screw (wall)	4 x M6 round screws			
Protection factor	IP23			
PCB protection	Water-repellent varnish (marine environment)			
Standards				
CE / EMC	EN61204-3			
CE / Security	EN60335-2-29			
Protections				
Against leaking input surge by VDR (Voltage Dependant Resistor) - Not covered by warranty / Against output polarity reversal by fuse rupture Against short-circuit and surge / Against abnormal overheating by cutting off the charger				
Communication				
CAN-Bus (NMEA on option)				
Options				
Temperature probe	Output voltage compensation for 24V : -36mV/°C (ref: 2.8m: STP-UNI-2.8 or 5m: STP-UNI-5.0)			
Parallel mounting	KIT-HPO-LINK : up to 4 units with real time balancing feature			
2.4" remote color touch-screen control panel	UNI-DISPLAY-R			

* Overall battery capacity recommended for lead-type batteries, C/10. For Lithium batteries, C/3, consult us if needed.

Part Number	HPO48-30	HPO48-40	HPO48-50
Model	48V / 30A	48V / 40A	48V-50A
Recommended battery bank*	150-400Ah	250-500Ah	350-700Ah
Input			
AC Voltage	From 90 to 265VAC single-phase automatic		
DC Voltage	From 121 to 346VDC		
Frequency	From 47 to 65Hz automatic		
Input current consumption 230/115VAC	9,0A/20,0A	11,0A/25,0A	15,0A/30,0A
Recommended power for a generator	2100W	2650W	3520W
Power factor	1		
Efficiency	87% typical		
Removable input fuses	2 x 20A 250VAC (6,3 x 32)	2 x 25A 250VAC (6,3 x 32)	2 x 32A 250VAC (6,3 x 32)
Output			
Number of battery banks	3 (including one for the engine battery) : +BAT E, +BAT 1 et +BAT 2 (integrated isolator), 1 negative -BAT. Each bank can be used individually and deliver the rated current		
Connection on threaded rods	M6		
Rated current / power	30A/1710W	40A/2280W	50A/2850W
Charging profile	IU or IUoU through internal dip switches (Boost, Absorption and Floating – factory setting). Selectable automatic Refresh		
Battery type	Lead-sealed as factory setting - Gel, AGM, Calcium Lead, Lithium, DC power-supply mode, etc. Specific request on demand		
Boost voltage	57,6VDC as factory setting for Lead-sealed		
Floating voltage	52,2VDC as factory setting for Lead-sealed		
Regulation tolerance before output diode and fuse	< 1 % (at rated conditions)		
Peak to peak ripple	< 1 % (at rated conditions)		
Automotive fuse in the minus pole -BAT	2x20A/80V	2x20A/80V	3x20A/80V
Environment			
Cooling	Electric fan controlled in temperature and current		
Sound level	< 50 dB SPL at 1m		
Operating temperature	Rated charge from -20°C (-4°F) to +50°C (122°F), derating above 50°C (122°F) Automatic charger switch off above 60°C (140°F); automatic restart when temperature decreases		
Storage T°	From -20°C to +70°C (-4°F to +158°F)		
Relative humidity	Up to 96 % without condensation		
Casing			
Material	Painted Aluminium		
Dimensions (length, height, depth)	270 x 360 x 130 mm (106 x 141,7 x 51,1 in)		270 x 410 x 130 mm (106 x 161,4 x 51,1 in)
Weight	6,8 kg (15 lbs)		9,0 kg (19,8 lbs)
Fixing screw (wall)	4 x M6 round screws		
Protection factor	IP23		
PCB protection	Water-repellent varnish (marine environment)		
Standards			
CE / EMC	EN61204-3		
CE / Security	EN60335-2-29		
Protections			
Against leaking input surge by VDR (Voltage Dependant Resistor) - Not covered by warranty / Against output polarity reversal by fuse rupture Against short-circuit and surge / Against abnormal overheating by cutting off the charger			
Communication			
CAN-Bus (NMEA on option)			
Options			
Temperature probe	Output voltage compensation for 48V : -72mV/°C (ref: 2.8m: STP-UNI-2.8 or 5m: STP-UNI-5.0)		
Parallel mounting	KIT-HPO-LINK : up to 4 units with real time balancing feature		
2.4" remote color touch-screen control panel	UNI-DISPLAY-R		

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Parallel mounting

