



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 battery banks. HPOWER+ 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 lead-type battery bank	600 - 1200Ah
Recommended lithium batteries (LiPOWER+)	LIP12-200-BMS or LIP12-300-BMS
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 (106 x 141,7 x 51,1 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

Part Number	HPO24-45	HPO24-60	HPO24-80	HPO24-100
Model	24V-45A	24V-60A	24V-80A	24V-100A
Recommended lead-type battery bank	300 - 600Ah	500 - 800Ah	700 - 1000Ah	800 - 1300Ah
Recommended lithium batteries (LiPOWER+)	LIP24-100-BMS	LIP24-200-BMS		LIP24-300-BMS
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	5 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			

AC-DC BATTERY CHARGERS HPOWER

48V

Part Number	HPO48-30		HPO48-40		HPO48-50	
Model	48V / 30A		48V / 40A		48V-50A	
Recommended lead-type battery bank	150-400Ah		250-500Ah		350-700Ah	
Recommended lithium batteries (LiPOWER+)	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					

AC-DC BATTERY CHARGERS HPOWER CERTIFIED

Marine type-approved



BV certified version ISO 9001:2015

With integrated touch-screen control panel and relays board.



BUREAU
VERITAS

12V

Part Number	HPO12-90-CERT
Model	12V-90A
Recommended lead-type battery bank	600 - 1200Ah
Recommended lithium batteries (LiPOWER+)	LIP12-200-BMS or LIP12-300-BMS
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 (106 x 141,7 x 51,1 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 : also available integrated on the front panel, please consult us

AC-DC BATTERY CHARGERS HPOWER CERTIFIED

Marine type-approved



BV certified version ISO 9001:2015

With integrated touch-screen control panel
and relays board.



24V

Part Number	HPO24-45-CERT	HPO24-60-CERT	HPO24-80-CERT	HPO24-100-CERT
Model	24V-45A	24V-60A	24V-80A	24V-100A
Recommended lead-type battery bank	300 - 600Ah	500 - 800Ah	700 - 1000Ah	800 - 1300Ah
Recommended lithium batteries (LiPOWER+)	LIP24-100-BMS	LIP24-200-BMS		LIP24-300-BMS
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	3250W
Power factor	1			
Efficiency	87% typical			
Removable input fuses	2 x 20A 250VAC (6,3 x 32) (F1/F2)	2 x 25A 250VAC (6,3 x 32) (F1/F2)		2 x 32A 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	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	5 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)			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 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 : also available integrated on the front panel, please consult us			

Parallel mounting

