



Innovative battery chargers

HPOWER 48



- ◆ New generation 48V
- ◆ Ruggedness
- ◆ Unrivalled performance
- ◆ Flexible and user-friendly
- ◆ LIN & CAN-BUS interface

PRESENTATION

Specialized in the design of automatic battery chargers for more than 30 years, CRISTEC is proud to offer you its 48V high quality battery chargers for the toughest conditions for professional and recreational purposes : HPOWER.*

PERFORMANCE

- **5-STAGE CHARGING PROFILE** to ensure fast and complete charging, power-supply mode available
- **FULL POWER** up to +50°C ambient with no derating allowing rated charge for intensive use in hot or confined place
- **3 ISOLATED BATTERY BANKS** with no current limitation
- **SUITABLE FOR ALL BATTERY TYPES** : flooded, Lead-sealed, Calcium-Lead, AGM, gel, Lithium, etc.
- **INCREASE** battery life



WORLDWIDE USE

- **90-265VAC/47-65HZ** auto-ranging
- **RATED OPERATION REGARDLESS** the available AC voltage including from a genset
- **MEMORY FUNCTION** : in case of unstable AC network the charger will not reset to prevent battery overcharging
- **BEST IN CLASS PROTECTION** : removable fuses and varistor, coated circuit board for marine environment
- **UL-1236 AND CSA 22.2-107.2** standards compliant (pending)

ERGONOMICS

- **FAST AND SECURE INSTALLATION** through external wall fixing device
- **LIGHTWEIGHT RUGGED** Aluminium casing with special coating for marine environment
- **OPTIMAL ACCESSIBILITY** : specific secured connection compartment
- **READABILITY COMFORT** : Dedicated LEDs and icons on the front
- **OPTION** : 2.5" colour touch-screen control panel



BUILT-IN FUNCTIONALITIES

- **CAN-BUS INTERFACE** for data transfer (as standard)
- **PARALLEL OPERATION** : up to 4 chargers through LIN-BUS interface
- **EXTERNAL TEMPERATURE PROBE** to monitor battery compartment (option)
- **ON/OFF**, default /battery low-voltage relays and automatic voltage drop compensation (option)
- **EASILY PROGRAMMABLE** for a variety of applications and specific settings (including charge profile)

Models

- **HPD48-30** - Charger 48V 30A
- **HPD48-50** - Charger 48V 50A





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HPOWER 48 RANGE



Part number	HPO48-30	HPO48-50
Model	48V/30A	48V/50A
Recommended battery bank (Pb)	150-400Ah	250-700Ah

INPUT		
Voltage	From 90 to 265VAC single-phase automatic *	
Frequency	From 47 to 65Hz automatic	
Input current consumption 230/115VAC	9.0A/20.0A	15.0A/30.0A
Recommended power for a generator	2100W	3520W
Power factor	1	
Efficiency	87% typical	
Removable input fuses	2 x 25A 250Vac (6.3x32) (F1/F2)	2 x 32A 250Vac (6.3x32) (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	30A/1710W	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	55.2VDC 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	2 x 20A/80V	3 x 20A/80V

ENVIRONMENT		
Cooling	Electric fan controlled in temperature and current	
Sound level	< 50 dBa at 1m	
Operating temperature	Rated charge from -20°C to +50°C, derating above 50°C. Automatic charger switch off above 60°C; automatic restart when temperature decreases	
Storage temperature	From -20°C to +70°C	
Relative humidity	Up to 96% without condensation	

CASING		
Material	Painted Aluminium	
Dimensions (length, height, depth) / Weight	270x360x130 mm / 6.8 kg	270x410x130 mm / 9.0 kg
Fixing screw (wall)	4 x M6 round screws	
Protection factor	IP23	
PCB protection	Water-repellent varnish	

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	

OPTIONS		
Temperature probe	Output voltage compensation -72mV/°C 2.8m : STP-UNI-2.8 • 5m : STP-UNI-5.0	
Parallel mounting	KIT-HPO-LINK : up to 4 units with real time balancing feature	
Remote color touch-screen control panel	UNI-DISPLAY-R : also available integrated on the front panel, please consult us	

* can be supplied in 144Vdc (121V – 169V).

Precautions: high voltage DC fuses upstream of the charger on the + and - poles. Consult us.

