



Innovative battery chargers

HPOWER



- ◆ New generation
- ◆ Ruggedness
- ◆ Unrivalled performance
- ◆ Flexible and user-friendly
- ◆ LIN & CAN-BUS interface
- ◆ 12 & 24V - 48V pending

PRESENTATION

Specialized in the design of automatic battery chargers for more than 30 years, CRISTEC is proud to offer you 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



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)

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, automatic burn-in test
- **UL-1236 AND CSA 22.2-107.2** standards compliant (pending)



DNV-GL VERSION

- With integrated touch-screen control panel, optional board and relay (pending). Please consult us





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HPOWER RANGE



Part number	HPO12-90	HPO24-45	HPO24-60	HPO24-80	HPO24-100
Model	12V/90A	24V/45A	24V/60A	24V/80A	24V/100A
Recommended battery bank	600-1200Ah	300-600Ah	500-800Ah	700-1000Ah	800-1300Ah

INPUT					
Voltage	From 90 to 265VAC single-phase automatic				
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	1600W	2100W	2800W	3520W
Power factor	1				
Efficiency	87% typical				
Removable input fuses	2 x 20A 250Vac (6.3x32) (F1/F2)		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) 1 negative -BAT Each bank can be used individually and deliver the rated current				
Connection on threaded rods	M6			M8	
Rated current / power	90A/1282W	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, LiFePO4, DC power-supply mode, etc. Specific request on demand				
Boost voltage	14.4VDC as factory setting for Lead-sealed	28,8VDC as factory setting for Lead-sealed			
Floating voltage	13.8VDC as factory setting for Lead-sealed	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	4 x 30A/32V	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 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 (12V : -18mV/°C • 24V : -36mV/°C) 2.8m : STP-HPO-2.8 • 5m : STP-HPO-5.0
Parallel mounting	KIT-HPO-LINK : up to 4 units with real time balancing feature
Remote color touch-screen control panel	HPO-DISPLAY-R : also available integrated on the front panel, please consult us

