CRISTEC
on-board energy

48V | **From 30 to 50A**

Battery chargers
HPOWER

Made in France

Warranty 3 years

High power

50°C
No derating

AC universal input

3 outputs

CAN-BUS interface

Lithium ready

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**.
They offer unwavering reliability thanks to a proven HF technology, for professional use in severe environmental conditions.

PERFORMANCE

Up to +50°C ambient with no derating allowing rated charge for intensive use in hot or confined place.

EASY AND ROBUST INSTALLATION

Aluminum housing treated to withstand marine environment and a secure wiring compartment.

PARALLEL OPERATION

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

3 ISOLATED BATTERY BANKS

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

BUS-CAN INTERFACE

A serial BUS-CAN interface allows real-time control and configuration of **HPOWER** chargers.

LITHIUM READY

They provide a 5-state charge curve for fast and complete charging of all types of batteries : open and sealed Lead-acid, Calcium Lead-acid, AGM, Gel, Lithium Ion, etc.

Leisure & commercial marine | **Mobile**
Industry | **Renewable energy** | **Robotics**

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Range
HPOWER

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Model	48V / 30A	48V / 50A
Part number	HPO48-30	HPO48-50
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 (6,3 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	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	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	3x20A/80V
ENVIRONNEMENT		
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 à +70°C	
Relative humidity	Up to 96 % without condensation	
CASING		
Material	Painted Aluminium	
Dimensions (lenght, height, depth)	270 x 360 x 130 mm	270x410x130 mm
Weight	6,8 kg	9,0 kg
Fixing screw (wall)	4 x M6 round screws	
Protection factor	IP23	
PCB protection	Water-repellent varnish	
STANDARDS		
CE / CEM	EN61204-3	
CE / Sécurity	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[1]	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	
2.4" remote color touch-screen control panel[2]	UNI-DISPLAY-R : also available integrated on the front panel, please consult us	

(*) Recommended battery capacity Lead-sealed, C/10 ratio.
For Lithium batteries, please consult us

(**) Can be supplied in 144VDC (121-169VDC).
Precautions : high voltage DC fuses upstream of the charger on the + and - poles.

(1)

(2)

The characteristics are subject to change without prior notice.

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CE RoHS compliant