



## Innovative battery chargers

# HPOWER DNV-GL



New generation  
Robustness  
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 high quality battery chargers for the toughest conditions for professional and recreational purposes : HPOWER-CERT.

### 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

### ERGONOMICS

- **FAST AND SECURE INSTALLATION** through made-to-measure external wall fixing device
- **LIGHTWEIGHT RUGGED** Aluminium casing with special coating for marine environment
- **OPTIMAL ACCESSIBILITY** : secured connection compartment

### BUILT-IN FUNCTIONALITIES

- **CAN-BUS INTERFACE** for data transfer
- **2,5" COLOR TOUCH-SCREEN** control panel
- **ON/OFF**, default/battery low-voltage relays and automatic voltage drop compensation
- **EASILY PROGRAMMABLE** for a variety of applications and specific settings

### OPTIONS

- **PARALLEL OPERATION** : up to 4 chargers through LIN-BUS interface
- **EXTERNAL TEMPERATURE** probe to monitor battery compartment

### DNV-GL TYPE APPROVED PRODUCTS

- With integrated touch-screen control panel and relays  
Certificate n° TAE00003JC





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Part number	HPO12-90-CERT	HPO24-45-CERT	HPO24-60-CERT	HPO24-80-CERT	HPO24-100-CERT
Model	12V/90A	24V/45A	24V/60A	24V/80A	24V/100A
Recommended battery bank (Pb)	600-1200Ah	300-600Ah	500-800Ah	700-1000Ah	800-1300Ah
<b>INPUT</b>					
Voltage	From 90 to 265VAC single-phase automatic				
Frequency	From 47 to 65Hz automatic				
Input current consumption 230/115VAC	6.0A/12.0A	6.0A/12.0A	8.0A/16.0A	11.0A/18.0A	14.0A/26.0A
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)
<b>OUTPUT</b>					
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			M8	
Rated current / power	90A/1282W	45A/1282W	60A/1710W	80A/2280W	100A/2850W
Charging curve	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	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	5 x 25A/32V
<b>ENVIRONMENT</b>					
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	100% with condensation				
<b>CASING</b>					
Material	Aluminium painted				
Dimensions (length, height, depth) / Weight	270x360x130 mm / 6.8 kg			270x410x130 mm / 9.0 kg	
Fixing screw (wall)	4 x M6 round screws. Mounting kit + securing screws				
Protection factor	IP23				
PCB protection	Water-repellent varnish				
<b>STANDARDS</b>					
EC / EMC	NF EN 61000-6-1 / NF EN 61000-6-2 / NF EN 61000-6-4				
EC / LVD	NF EN 60335-2-29				
<b>PROTECTIONS</b>					
	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				
<b>BUILT-IN FUNCTIONALITIES</b>					
Temperature probe (option)	Output voltage compensation (12V : -18mV/°C • 24V : -36mV/°C) 2.8m : STP-HPO-2.8 • 5m : STP-HPO-5.0				
Parallel mounting (option)	KIT-HPO-LINK : up to 4 units with real time balancing feature				
Remote color touch-screen control panel	HPO-DISPLAY-R : fully integrated as standard				
Isolated CAN-BUS interface	Fully integrated as standard				

F-HPO-CERT-02-A Specifications may change without notice. Please contact us.