



From 12 to 48V From 12 to 60A

# **YPOWER**+

**Battery chargers** Innovative and sustainable

















# **YPOWER**+

# Optimal made-to-measure charging for a longer lifespan

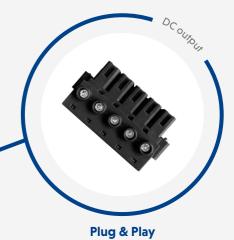
Founded in 1983, CRISTEC - CReation, Innovation Scientific and TEChnical – is the specialist in energy conversion.

CRISTEC offers expertise on an international scale with a distribution network present in more than 50 countries.

CRISTEC is proud to offer you the assets of its sixth generation HF charger range, YPOWER+, having already sold more than 200,000 units throughout the world.







From 12 to 48V From 12 to 60A







**Made in France** 

**Warranty 3 years** 

#### Silent operating

CRISTEC is the only manufacturer to offer a 12V 60A charger with natural convection (without fan). This specificity gives the YPOWER+ chargers a completely silent operation and an optimized lifespan. It is therefore possible to install them anywhere on board, including under a berth.



#### 4 independent outputs \*

The YPOWER+ chargers are the only chargers having 4 independent outputs, including one dedicated to the engine battery.

(\*Except models 12V 16A & 25A, 24V 12A).



# Low energy bluetooth

The chargers are equipped with a Bluetooth Low Energy (BLE), variant of "classic" Bluetooth (except OE version – first fit Original Equipment).

The major advantage of BLE is its low power consumption (it consumes half as much as a classic Bluetooth).



## Thermal withstand

Chargers have full charge up to +60 °C with no loss, resistant to harsh environments.

They can be installed in the engine room thanks to ISO8846 compliance – Protection against ignition of flammable gases.



### 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 internal pushbutton
- Reboost: new automatic Boost phase if DC consumers and the state of batteries so require.

In addition, DC power-supply mode is also available.



#### **Easy connection**

Plug & Play connection, secure, simple and fast without opening the charger. AC and DC connectors included (except OE version – first fit Original Equipment).



### **Adaptative charging**

Custom-made and simultaneous recharge of 4 battery banks (except models 12V 16A & 25A, 24V 12A - 3 banks).

YPOWER+ chargers are compatible with all types of batteries:

- Opened classic lead
- Sealed, gel or AGM
- Spiral sealed
- Lithium Iron Phosphate (LiFePO4) with BMS
- Other technologies: contact us.



#### Worldwide use

Automatic detection of power supply network, from 90 to 265VAC and from 47 to 65Hz.



### Remote control

The chargers are fitted with a CAN-Bus interface as standard (according to models).





Part Number	YPO12-16STPL (OEPL)	YPO12-25STPL (OEPL)	YPO24-12STPL (OEPL)	YPO12-40STPL (OEPL)	YPO12-60STPL (OEPL)	YPO24-20STPL (OEPL)	YPO24-30STPI (OEPL)	
Model*	12V/16A	12V/25A	24V/12A	12V-40A	12V-60A	24V-20A	24V-30A	
Recommended battery bank**	100-200Ah	200-300Ah	100-200Ah	300-500Ah	500-700Ah	200-300Ah	300-500Ah	
Input								
Voltage			From 90 t	o 265VAC single-phase	automatic			
Frequency	From 47 to 65Hz automatic							
Current consumed 230/115VAC	1.1/2.2A	1.7/3.4A	1.7/3.4A	2.7/5.6A	4.4/8.7A	2.9/5.9A	4.5/8.8A	
Recommended power for a generator	280W	435W	420W	700W	1050W	700W	1050W	
Power factor				1				
Efficiency				> 90%				
Input fuse	T6.3A/250V - SCHURTER Ref. 0001.1032 (F101) T15A/250V - 6.3x32 (F101)							
Output								
Number of battery banks	3 separate positive terminals: +BAT E, +BAT 1 and +BAT 2 (integrated MOSFET splitter) 1 negative terminal : -BAT Each bank can be used individually and delivers the rated current			4 separate positive terminals : +BAT E, +BAT 1, +BAT 2 and +BAT 3 (integrated MOSFET splitter) 1 negative terminal : -BAT Each bank can be used individually and delivers the rated current				
Nominal current (+/-7%) @ rated power	16A/228W	25A/356W	12A/342W	40A/570W	60A/855W	20A/570W	30A/855W	
Charging curve		Charging curve selec	tion by internal push-bu	tton, Bluetooth or CAN	Bus (Boost, Absorption,	Floating and Refresh)		
Battery type	Se	ealed lead as factory sett	ing - Gel, AGM, calcium	lead, LiFePO4, DC pow	er-supply mode, etc. Sp	ecific request on dema	and	
Boost voltage for sealed lead battery (factory setting)	14.4VDC		28.8VDC	14.4	14.4VDC		28.8VDC	
Floating voltage for sealed lead battery (factory setting)	13.8VDC		27.6VDC	13.8VDC		27.6VDC		
Peak to peak ripple and noise	< 2% (at rated conditions)							
Automotive fuses mounted in series in minus pole -BAT	1 x 20A/32V (F400)	1 x 30A/32V (F400)	1 x 15A/32V (F400)	3 x 30A/32V (F400, F401, F402)	4 x 30A/32V (F400, F401, F402, F403)	1 x 30A/32V (F400)	2 x 30A/32V (F400, F401)	
Environment								
Cooling				Natural (fanless)				
Sound level	0							
Operating T° at 230VAC	From -20°C to +60°C, derating from 60°C							
Storage T°	From -20°C to +70°C							
Relative humidity	up to 70% (95% without condensation)							
Casing								
Material		Casing o	comprises 3 parts: Alumin	nium sink frame / Therm	oplastic body / Aluminiu	ım clasp		
Dimensions (length, height, depth) / Weight	236 x 180 x 96mm / 2kg			289 x 195 x 106mm 3.5kg	289 x 195 x 106mm 3.7kg	289 x 195 x 106mm / 3.6kg		
Fixing center distance	219 x 155mm				272 x 1	70mm		
Fixing screw (wall)	4 M5 round head screws							
Protection factor	IP22							
Electronic card protection			Water-rep	ellent varnish (marine er	vironment)			
Standards								
CE declaration of conformity	Available on request							
CE / EMC	EN61204-3							
CE / Security				EN60335-2-29, ISO8846	•			
Protections								
	Against transient input overvoltage by varistor (Not covered by warranty) Against output polarity reversal by fuses Against short-circuits and output overloads Against abnormal overheating							
Communication								
	CAN-Bus (according to models) / Bluetooth as standard (optional on OE version)  (optional on OE version)							
Options								









 $<sup>^{\</sup>circ}$  Versions 24V 40A, 36V 20A & 48V 15A pending  $^{\circ\circ}$ Recommended battery capacity for lead type batteries, ratio C/10. Consult us for lithium batteries capacity