

# AC-DC battery chargers



Silent



Up to 4  
outputs



Bluetooth



No derating



Lithium ready



CAN-BUS  
interface



Plug & Play

**YPOWER+**



# CRISTEC

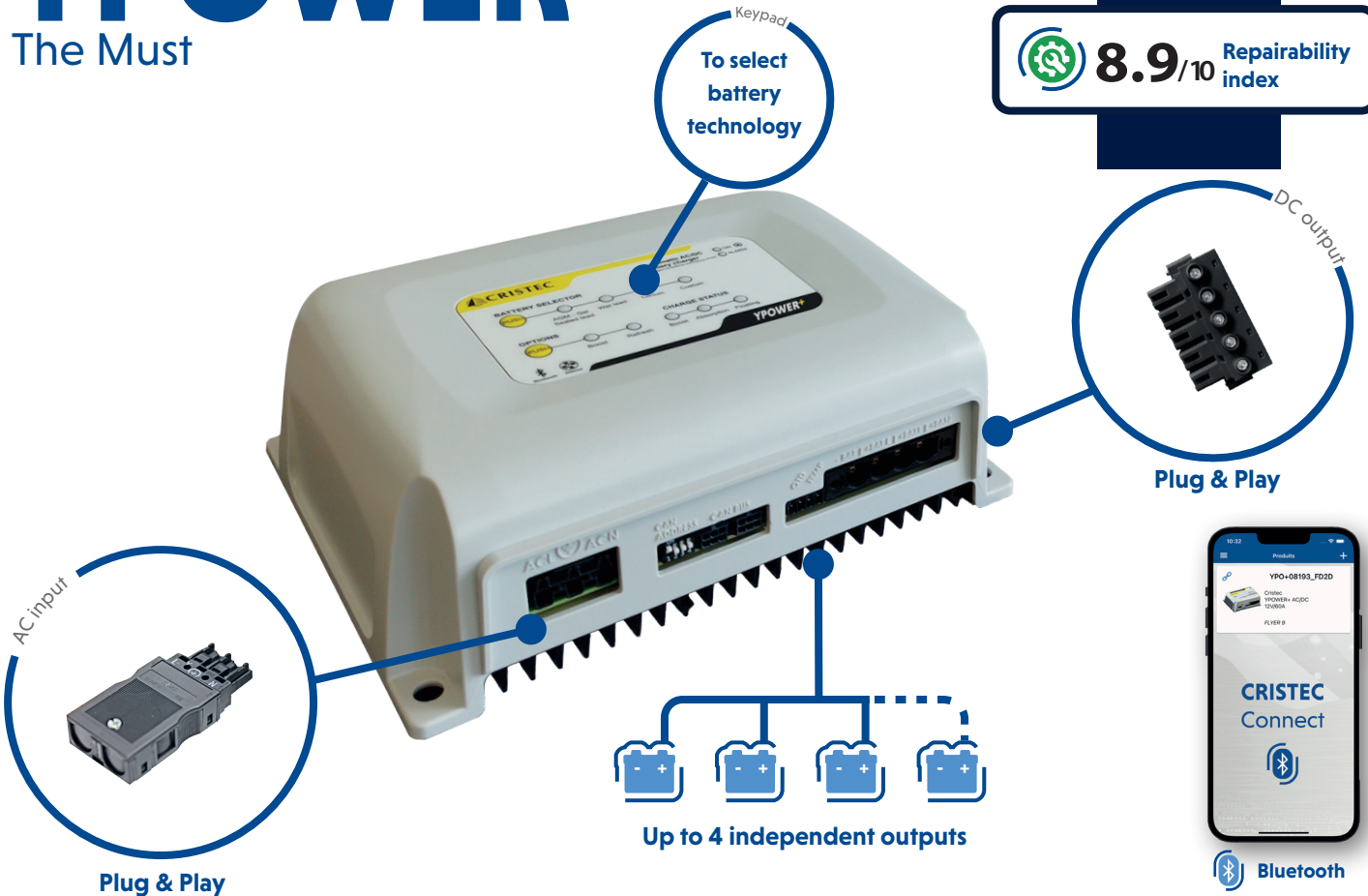


# YPOWER+

The Must

3 Warranty 3 years

8.9/10 Repairability index



AC-DC BATTERY CHARGERS



### Silent operating

CRISTEC is the only manufacturer offering chargers up to 12V 60A with natural convection (without fan). This advantage 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.



### 3 or 4 independent outputs depending of models

The YPOWER+ chargers are the only chargers having up to 4 independent and non-limited outputs.



### Low energy bluetooth

The YPOWER+ chargers are equipped with a Bluetooth Low Energy (BLE), variant of "classic" Bluetooth. The major advantage of BLE is its low power consumption as it consumes half of a classic Bluetooth.



### Thermal withstand

Chargers have full charge up to +40°C for entry models and +60°C (140°F) for others with no loss.



### Ignition protected

All models can be installed in the engine room thanks to ISO8846 compliance which protects against ignition of flammable gases.



### Worldwide use

Automatic detection of power supply network, from 90 to 265VAC and from 47 to 65Hz. You do not have to care about the AC power grid or genset voltage.



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

A regulated DC power-supply mode is also available and YPOWER+ chargers can also be used as high-voltage DC-DC converters with input ranging from 121 to 375VDC.



### Easy connection

Plug & Play connection, secure, simple and fast without opening the charger. AC and DC connectors are included.



### Adaptative charging

Custom-made and simultaneous recharge of 3 or 4 battery banks. YPOWER+ chargers can be connected to various types of batteries simultaneously:

- Opened classic lead
- Sealed, gel or AGM
- Spiral sealed



Lithium Iron Phosphate (LiFePO4) with BMS. Selection of your technology of battery is easy thanks to the front keypad.



### Remote control

The chargers are fitted with a CAN-Bus and a Bluetooth interface as standard. Connection to an NMEA network is also available through an optional adaptor, refer to charger's options page.



Bluetooth



Part Number*	YPO12-20STPL	YPO12-30STPL	YPO12-40STPL	YPO12-60STPL
Model	12V/20A	12V/30A	12V-40A	12V-60A
Recommended battery bank**	100-200Ah	200-300Ah	300-500Ah	500-700Ah
<b>Input</b>				
AC Voltage	From 90 to 265VAC single-phase automatic			
DC Voltage	From 121 to 375VDC			
Frequency	From 47 to 65Hz automatic			
Current consumed 230/115VAC	1.3/2.6A	2/4A	2.7/5.6A	4.4/8.7A
Recommended power for a generator	450W	650W	700W	1050W
Power factor	1			
Efficiency	92.8% in 230VAC & 91% in 115VAC			
Input fuse	T6.3A/250V		T15A/250V	
<b>Output</b>				
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	20A/276W	30A/356W	40A/570W	60A/855W
Charging curve	Charging curve selection by push-button, Bluetooth or CAN-Bus (Boost, Absorption, Floating and Refresh)			
Battery type	Sealed lead, Gel, AGM as factory setting - calcium lead, LiFePO4, DC power-supply mode, etc. Specific request on demand			
Boost voltage for sealed lead battery (factory setting)	14.4VDC			
Floating voltage for sealed lead battery (factory setting)	13.8VDC			
Peak to peak ripple and noise	< 2% (at rated conditions)			
Automotive fuses mounted in series in minus pole -BAT	1 x 30A/32V	2 x 30A/32V	3 x 30A/32V	4 x 30A/32V
<b>Environment</b>				
Cooling	Natural (fanless)			
Sound level	0 dB			
Operating T° at 230VAC	From -20°C to +60°C (-4°F to +140°F)			
Derating (rated charge)	from 40°C (140°F)	from 40°C (104°F)	from 60°C (140°F)	from 60°C (140°F)
Storage T°	From -20°C to +70°C (-4°F to +158°F)			
Relative humidity	up to 70% (95% without condensation)			
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)			
<b>Casing</b>				
Material	Aluminium sink frame and clasp / Thermoplastic body			
Dimensions (length, height, depth)	238 x 181 x 81mm (9.4 x 7.1 x 3.2 in)		289 x 197 x 105mm (11.4 x 7.8 x 4.1 in)	
Weight	2kg (4.4 lb)		3.5kg (6.6 lb)	3.7kg (6.7 lb)
Fixing center distance	219 x 155mm (8.6 x 6.1 in)		272 x 170mm (10.7 x 6.7 in)	
Fixing screw (wall)	4 M5 round head screws			
Protection factor	IP34 (electronic) & IP22 (connections)			
Electronic card protection	Sealed casing		Water-repellent varnish (marine environment)	
<b>Standards</b>				
CE declaration of conformity	Available on request			
CE / EMC	EN61204-3			
CE / Security	EN60335-2-29, ISO8846			
<b>Protections</b>				
Against transient input overvoltage by varistor (Not covered by warranty) / Against output polarity reversal by removable fuses / Against short-circuits and output overloads / Against abnormal overheating				
<b>Communication</b>				
CAN-Bus / Bluetooth				
<b>Options</b>				
Temperature probe & OTD probe (Over Temperature Device)				

\*Included AC and DC connectors for item codes containing «ST» = Standard (except item codes containing «OE» – Original Equipment)

\*\* Overall battery capacity recommended for lead-type batteries, C/10. For Lithium batteries, C/3, consult us if needed.





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