

# Shore-power distribution chargers

**UEPOWER+**



Silent



Compact



Up to 4  
outputs



Bluetooth



Lithium

# UEPOWER+

3 Warranty 3 years

9.4/10 Repairability index



## Presentation

The new CRISTEC shore-power units combine, in a single cabinet, AC protection and distribution, as well as an automatic battery charger. The complete system meets the European standards in force and makes it possible to optimize size and assembly time. User protection consists of a two-pole differential RCD (Residual Current Device) and the distributions are made by 2 to 6 two-pole circuit breakers (Over Current Protection Device). The battery charger function is ensured by an HF switch-mode electronic board, stemming from the latest YPOWER+ battery charger.



### Silent operating

CRISTEC offers shore-power units with natural convection (without fan). This specificity gives them a completely silent operation and an optimized lifespan.



### Up to 4 independent outputs

The shore-power units have either 3 or 4 independent charger outputs, including one dedicated to the engine battery.



### 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 and genset voltage.



### Easy to install

Selection of the battery technology can be done via the front keypad or via bluetooth application or CAN-BUS communication (according to model).



### 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.

NMEA



### 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.



### Adaptive charging

Custom-made and simultaneous recharge of either 3 or 4 battery banks. UEPOWER+ shore-power units are compatible with all types of batteries:

- Opened classic lead
- Sealed, gel or AGM
- Spiral sealed
- Lithium Iron Phosphate (LiFePO4) with BMS



### Low energy bluetooth

The shore-power units 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.

# SHORE-POWER DISTRIBUTION CHARGERS

## UEPOWER+

# 12V

Model	AC electrical panel			Battery charger				
	Main RCD	AC outputs	Circuit breakers	Voltage	Nominal current	Recommended battery bank <sup>(1)</sup>	Number of outputs	
UEYPOPL/12-20/2D	30mA / 16A	2	2 x 10A	12V	20A	100-200Ah	3	
UEYPOPL/12-20/3D		3	3 x 10A					
UEYPOPL/12-20/4D		4	4 x 10A					
UEYPOPL/12-30/2D		2	2 x 10A		30A	200-300Ah	3	
UEYPOPL/12-30/3D		3	3 x 10A					
UEYPOPL/12-30/4D		4	4 x 10A					
UEYPOPL/12-40/3D		30mA / 32A	3		3 x 10A	40A	300-400Ah	4
UEYPOPL/12-40/4D			4		4 x 10A			
UEYPOPL/12-40/4D3			1 x 10A + 3 x 16A					
UEYPOPL/12-60/3D			3		3 x 10A			
UEYPOPL/12-60/4D	4	4 x 10A						
UEYPOPL/12-60/4D3	1 x 10A + 3 x 16A							

Model	UEPOWER+ 12V-20A	UEPOWER+ 12V-30A	UEPOWER+ 12V-40A	UEPOWER+ 12V-60A
<b>Casing</b>				
Material	Frame and cover of EZ steel / Anodized aluminium heatsink			
Dimensions (length, height, depth)	350 x 241 x 171mm (13,77 x 9,48 x 6,73in)			
Weight	7Kg (15,43lbs)			
Fixing center distance	180 x 133mm (7,08 x 5,23in)			
Fixing screw (wall)	4 x M5 round head screws			
Protection factor	IP20			
<b>Input</b>				
Voltage	115VAC <sup>(2)</sup> / 230VAC +/-15% single-phase			
Frequency	50/60Hz <sup>(2)</sup>			
Current consumed 230/115VAC	1.3/2.6A	2/4A	2.7/5.6A	4.4/8.7A
Efficiency	92.8% in 240VAC & 91% in 120VAC			
<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 keypad, Bluetooth application or CAN-BUS communication			
Battery type	Sealed lead, Gel, AGM as factory setting - Other selections by pushbutton: calcium lead, LiFePO4, DC power-supply mode, etc. Specific request on demand			
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>Electrical protections</b>				
Against transient input overvoltage by varistor (not covered by warranty) / Against output polarity reversal by fuses / Against abnormal overheating				
<b>Environement</b>				
Sound level	0 dB			
Bluetooth	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)			
<b>Standards</b>				
CE / EMC	NF EN61000-6-1, NF EN61000-6-2			
<b>Communication</b>				
CAN-Bus (NMEA on option) / Low Energy Bluetooth (BLE)				
<b>Option</b>				
Temperature probe	Output voltage compensation -18mV/°C (ref: 2.8m: STP-UNI-2.8 or 5m: STP-UNI-5.0)			

<sup>(1)</sup> Overall battery capacity recommended for lead-type batteries, C/10. For Lithium batteries, C/3, consult us if needed.

<sup>(2)</sup> Consult CRISTEC for any use at 115VAC/60Hz

# SHORE-POWER DISTRIBUTION CHARGERS

## UEPOWER+

# 24V

Model	AC electrical panel			Battery charger			
	Main RCD	AC outputs	16A circuit breakers	Voltage	Nominal current	Recommended battery bank <sup>(1)</sup>	Number of outputs
UEYPOPL/24-35/3D	30mA / 16A	3	3 x 10A	24V	35A	200-400Ah	4
UEYPOPL/24-35/4D		4	4 x 10A				
UEYPOPL/24-35/4D3	30mA / 32A		3 x 10A + 1 x 16A				

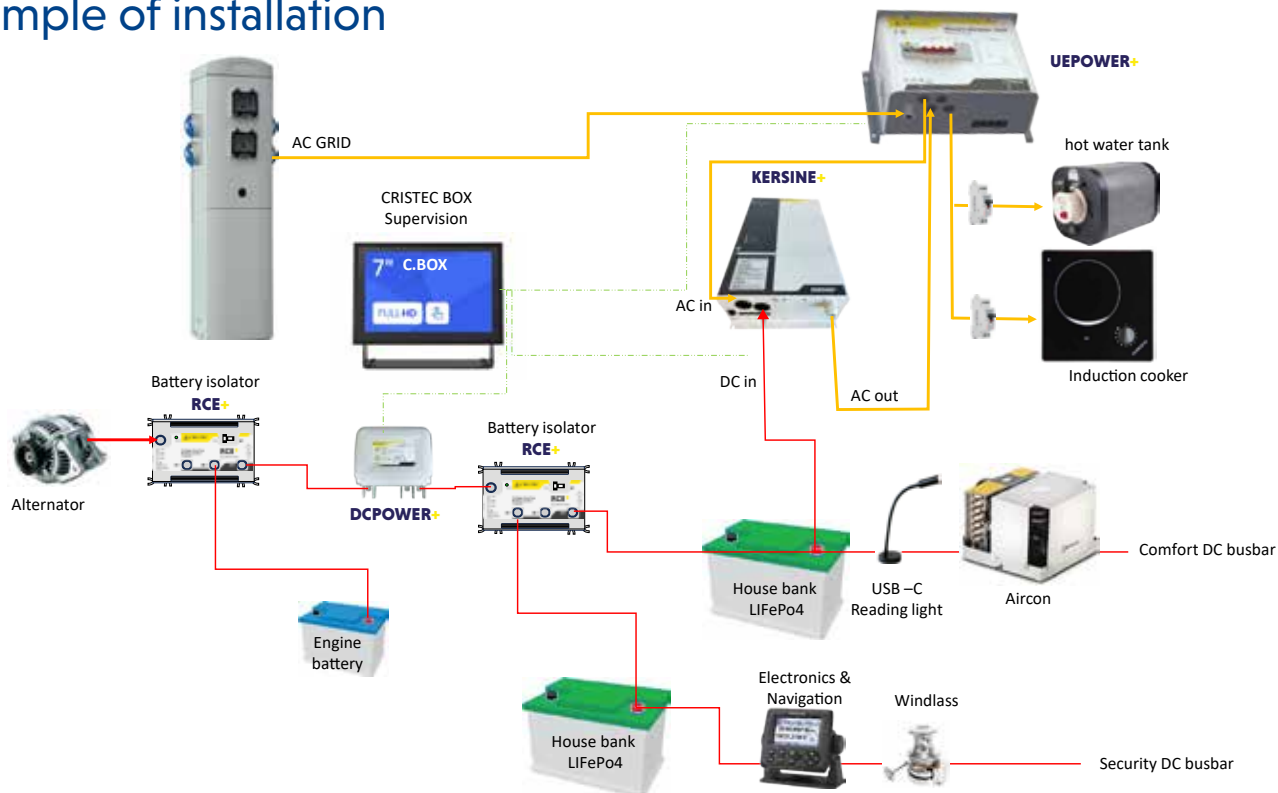
Model	UEPOWER+ 24V-35A
<b>Casing</b>	
<b>Material</b>	Frame and cover of EZ steel / Anodized aluminium heatsink
<b>Dimensions (length, height, depth)</b>	350 x 241 x 171mm (13,77 x 9,48 x 6,73in)
<b>Weight</b>	7Kg (15,43lbs)
<b>Fixing center distance</b>	180 x 133mm (7,08 x 5,23in)
<b>Fixing screw (wall)</b>	4 x M5 round head screws
<b>Protection factor</b>	IP20
<b>Input</b>	
<b>Voltage</b>	115VAC <sup>(2)</sup> / 230VAC +/-15% single-phase
<b>Frequency</b>	50/60Hz <sup>(2)</sup>
<b>Current consumed 230/115VAC</b>	4.4/8.7A
<b>Efficiency</b>	92.8% in 240VAC & 91% in 120VAC
<b>Output</b>	
<b>Number of battery banks</b>	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
<b>Nominal current (+/-7%) @ rated power</b>	30A/855W
<b>Charging curve</b>	Charging curve selection by keypad, Bluetooth application or CAN-BUS communication
<b>Battery type</b>	Sealed lead, Gel, AGM as factory setting - Other selections by pushbutton : calcium lead, LiFePO4, DC power-supply mode, etc. Specific request on demand
<b>Automotive fuses mounted in series in minus pole -BAT</b>	4 x 30A/32V
<b>Electrical protections</b>	Against transient input overvoltage by varistor (not covered by warranty) / Against output polarity reversal by fuses / Against abnormal overheating
<b>Environment</b>	
<b>Sound level</b>	0 dB
<b>Bluetooth</b>	Low energy bluetooth (BLE) - Power: +9dBm (frequency: 2412-2484MHz)
<b>Standards</b>	
<b>CE / EMC</b>	NF EN61000-6-1, NF EN61000-6-2
<b>Communication</b>	
	CAN-Bus (NMEA on option) / Low Energy Bluetooth (BLE)
<b>Option</b>	
<b>Temperature probe</b>	Output voltage compensation -36mV/°C (ref: 2.8m: STP-UNI-2.8 or 5m: STP-UNI-5.0)

<sup>(1)</sup> Overall battery capacity recommended for lead-type batteries, C/10. For Lithium batteries, C/3, consult us if needed.

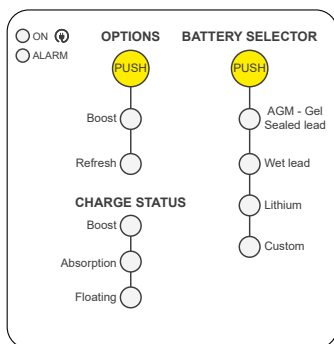
<sup>(2)</sup> Consult CRISTEC for any use at 115VAC/60Hz

# SHORE-POWER DISTRIBUTION CHARGERS

## Example of installation

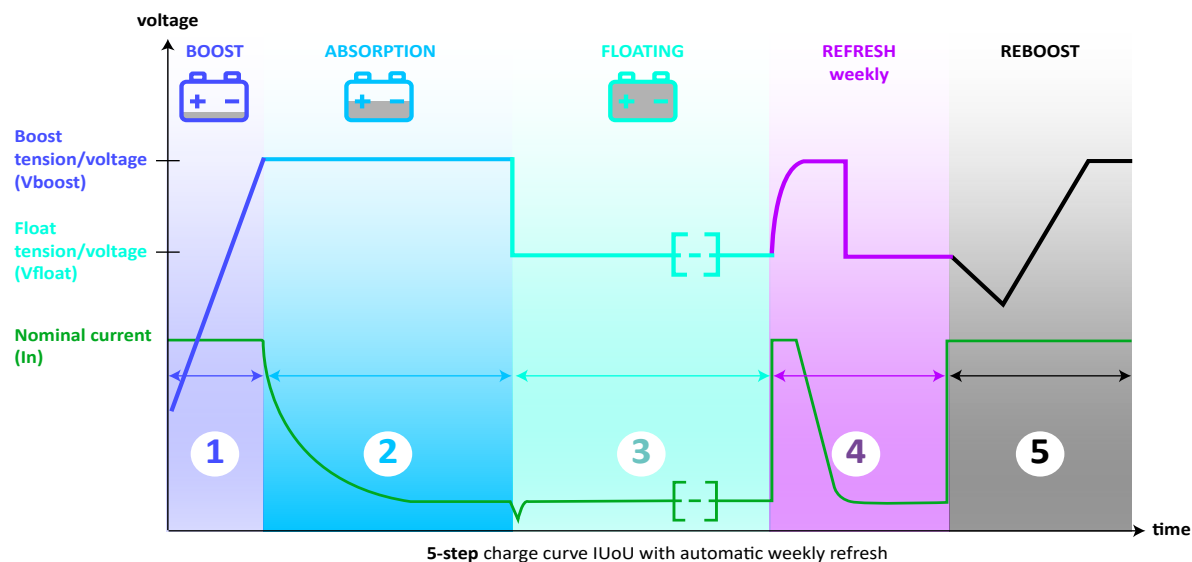


## Choosing a charging curve on the UEPOWER+



With the PUSH button of the BATTERY SELECTOR you can choose the battery technology and its associated charging curve. If you use the Bluetooth Cristec Connect application on your mobile phone or tablet and choose a different charging curve the CUSTOM led switches on.

When choosing any battery technology above, the BOOST charging curve from the OPTIONS menu is selected by default. When the PUSH button is pressed again, you select the **5-step charging curve** with BOOST and REFRESH as follows :



If no OPTIONS are selected (no green led is lit on the OPTIONS menu) the charging curve starts with the Float voltage.

# SHORE-POWER DISTRIBUTION CHARGERS

Typical installation

