PowerFirst

A Global Leader in Charger Manufacture













Smart 800









Intelligent design for charging AGM, GEL, Flooded and Lithium batteries, the Smart 800 Charger is available in on- and off-board configurations. AC/DC cabling is completely customizable.

Main applications:









Machine Integration



Option CAN bus communication enables deeo

machine integration, disgnostics control.





Premium charging Quality



Engineered using design for reliability. Validated for long service life in harsh operating conditions. Tested to perform reliably and durably in automotive applications. Manufactured in a world class facility specializing in high reliability solutions.



Global + Efficient

Charge profiles to precisely charge AGM, GEL, Capable of operating reliably on any single-phase grid Flooded and Li-ion batteries. Developed in worldwide. High-efficiency performance for electricity PowerFirst's battery lab to balance charge time,battery savings and shorter charge times. Active cooling life and application requirements. enables optimal peak performance.















Smart 800 Charger Specifications

DC Output	24 VDC	36 VDC	48 VDC
Maximum DC output voltage	33.6 V	50.4 V	67.2 V
Maximum DC output current	30 A	18 A	13 A
Maximum DC output power		800 W	
Deep discharge recovery (minimum voltage)	16 V	24 V	32 V
Maximum C3 interlock current		7 A	
Battery type	Lead acid (wet / AGM / gel), lithium		
Reverse polarity	Electronic protection with auto-reset		
Short circuit	Electronic current limit		

AC Input		
AC input voltage range	85-270 VAC	
Nominal AC input voltage	100-240 VAC ±10%	
Nominal AC input frequency	50 / 60 Hz	
Maximum AC input current	9.5 A	
Nominal AC input current	9.5 A @ 100 VAC	4.75 A @ 240 VAC
Power factor	>0.99 @ 120 VAC	>0.98 @ 230 VAC

Regulatory	
Effciency	88% at full load, 120 VAC, 48 VDC 99% at full load, 240 VAC, 48 VDC
Safety (LVD)	UL1564, CSA 107.2, EN 60335-2-29
Emissions (EMC)	EN55014
Immunity (EMC)	EN 61000-3-2, EN 61000-3-3

Mechanical		
Dimensions	L241.2 x W135 x H60 mm	
Weight	2.5 kg	
AC input connector	IEC320 / C14 (requires country-specifc cord)	
DC output connector	Customizable	
Communication	CAN bus 485 (optional)	
inhibit function	ON / OC	
Cooling	Active cooling with fan (Variable speed)	

Environmental		
Enclosure	IP21	
Operating temperature	-20°C to +45°C	Derated at >45°C
Storage temperature	-40°C to +70°C	

Visit epowerfirst.com/charger/Smart-family/ to view the complete product datasheet. Copyright © 2022 PowerFirst Company Limited. All rights reserved.

Highlighted Features:

- Optional CAN bus, RS485, I2C, Wi-Fi, Bluetooth communication for machine integration or lithiumBMS.
- User friendly LED indicators for AC source, batterystatus, charging, error.
- Field programmable with up to 30 charge profiles
 Auto-recharge for low voltage in maintenance mode
- OEM customizable & field replaceable AC/DC cabling
- Additional portable handle available

















