



Smart 450

Intelligent design for charging AGM, GEL, Flooded and Lithium batteries, the Smart 450 Charger is available in on- and off-board configurations. AC/DC cabling is completely customizable.

Main applications:



High Reliability

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.



Charging profile setting

Dip-switches are used for setting of 16 charging profiles.



Premium charging Quality

Charge profiles to precisely charge AGM, GEL, Flooded and Li-ion batteries. Developed in PowerFirst's battery lab to balance charge time, battery life and application requirements.



Global + Efficient

Capable of operating reliably on any single-phase grid worldwide. High-efficiency performance for electricity savings and shorter charge times. Active cooling enables optimal peak performance.



Smart 450 Charger Specifications

DC Output	12 VDC	24 VDC	36 VDC	48 VDC
Max. DC output voltage	16.8 V	33.6 V	50.4 V	67.2 V
Max. DC output current	25 A	15 A	10 A	8 A
Max. DC output power	450 W			
Deep discharge recovery (minimum voltage)	8 V	16 V	24 V	32 V
Maximum 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 \pm 10%
Nominal AC input frequency	50 / 60 Hz
Maximum AC input current	6 A
Nominal AC input current	8 A @ 100 VAC 4 A @ 240 VAC
Power factor	>0.99 @ 120 VAC >0.98 @ 230 VAC

Regulatory	
Efficiency	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	L184.2 x W135 x H60 mm
Weight	1.8 kg
AC input connector	IEC320 / C14 (requires country-specific 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

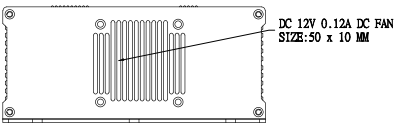
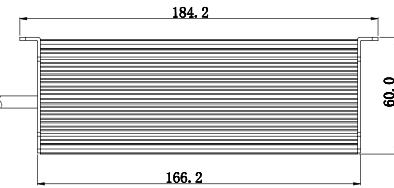
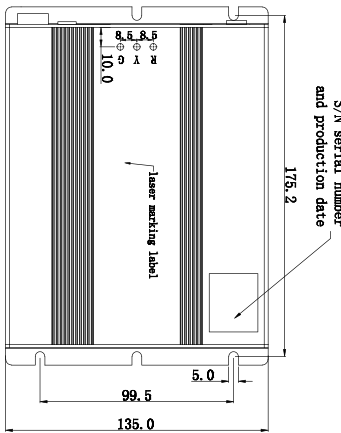
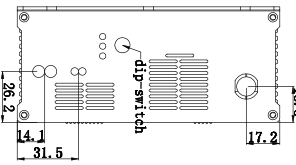
Visit epowerfirst.com/charger/Smart-family/ to view the complete product datasheet.

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Highlighted Features:

- User friendly LED indicators for AC source, battery status, charging, error.
- Auto-recharge for low voltage in maintenance mode
- OEM customizable & field replaceable AC/DC cabling
- Additional portable handle available



Request More Information

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