



# U3600



Intelligent design for charging AGM, GEL, WET and Lithium batteries, the U3600 Charger is available in on- and off-board configurations and 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.



### 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.



### 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.

# U3600 Charger Specifications

DC Output	24 VDC	36 VDC	48 VDC	72 VDC
Maximum DC output voltage	33 V	49.5 V	66 V	82.5 V
Maximum DC output current	120 A	90 A	60 A	45 A
Maximum DC output power	3600 W			
Deep discharge recovery (minimum voltage)	16 V	24 V	32 V	40 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	40 A	
Nominal AC input current	40 A @ 100 VAC	34 A @ 120 VAC
	18 A @ 230 VAC	17 A @ 240 VAC
Power factor	>0.99 @ 120 VAC	>0.98 @ 230 VAC

Regulatory	
Efficiency	90% at full load, 120 VAC, 48 VDC   92% at full load, 240 VAC, 48 VDC
Safety (LVD)	UL1564, CSA 107.2, EN 60335-2-29
Emissions (EMC)	FCC Part 15 / ICES 003 Class A, EN55011, EN 61000-6-4
Immunity (EMC)	EN 61000-3-2, EN 61000-3-3, EN 61000-6-2

Mechanical	
Dimensions	L404 x W270 x H97.5 mm
Weight	10 kg
AC input connector	IEC320 / C14 (requires country-specific cord)
DC output connector	M6 threaded fasteners for ring terminals (field replaceable)
Mounting holes	10 mm diameter slots
Cooling	Active cooling with fan (Variable speed, field serviceable, field replaceable)

Environmental		
Enclosure	IP20	
Mechanical shock & vibration	GMW3172	
Corrosion & humidity		
Thermal fatigue		
Operating temperature	-20°C to +40°C	Derated at >40°C
Storage temperature	-20°C to +60°C	

Visit [epowerfirst.com/charger/UniQ-family/](http://epowerfirst.com/charger/UniQ-family/) to view the complete product datasheet.

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### Highlighted Features:

- Optional CAN bus, RS485, PC, Wi-Fi, Bluetooth communication for machine integration or lithiumBMS.
- User friendly LED indicators for AC source, battery status, 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

