

Universal Power Charger 800

90 - 255VAC INPUT, MICROPROCESSOR CONTROLLED



Approved condition for use (CE mark):
Marine and Automotive applications
Fixed installations in buildings
Type approved: E13 3026 and E13 3027

Power charging is the ability to simultaneously act as a battery charger and power supply to power any connected loads simultaneously without gassing the battery. Thus providing opportunity charging, long term charging and the safe and reliable operation of electrical on-board equipment.

The Universal Power Charger 800 is very compact, making it ideal for on-board use. Up to 50A output from such a small package is achieved through high efficiency using the very latest electronic components.

The micro-processor control of the charging has preset regimes which accurately charge Flooded as well as AGM and Cyclic Duty GEL batteries.

The charger can be equipped with optional capabilities features such as remote temperature/voltage sensors for charging of batteries mounted some distance from the charger, significantly improving the rate of battery charging

KEY FEATURES

- 90-255VAC input
- Also available in '110VAC only'
- 12V and 24V (with 36V, 48V, 72V and 96V options)
- Output current 20-50A
- High efficiency/cool running
- Small and easy to install
- Latest MosFET technology
- Microprocessor controlled with pre-set regimes for VRLA GEL and AGM and Flooded
- Unity power factor input
- Fully automatic 4 stage charge cycle control
- Remote temperature/voltage sensor options
- Applications and in-service support from a UK company

Intelligent Charging

Unlike basic chargers, the UPC charger operates on an advanced principle making it suitable for both overnight and opportunity charging.

An optimum four stage charging regime (see overleaf) safely refills the battery in the quickest time possible - thereby improving the life of the battery.

Better charged batteries last longer

After switch-on, or after the battery voltage dips, the charger will operate at its maximum rating, bulk charging the battery as fast as possible.

The UPC is programmed to continue bulk charging until it reaches a higher voltage - "forcing" charge into the battery. Accurate sensing avoids the



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charger reaching the 'gassing' point and it safely switches to a second stage bulk charge, and finally to a taper charge. This process dramatically reduces the time taken to get to full charge. In addition to this, the charger is temperature compensated, adjusting its output to ensure that when the batteries are cold the voltage is raised and when warm the voltage is reduced. This ensures charging in cold weather and avoids gassing in warm conditions.

Optional Panels and Sensing

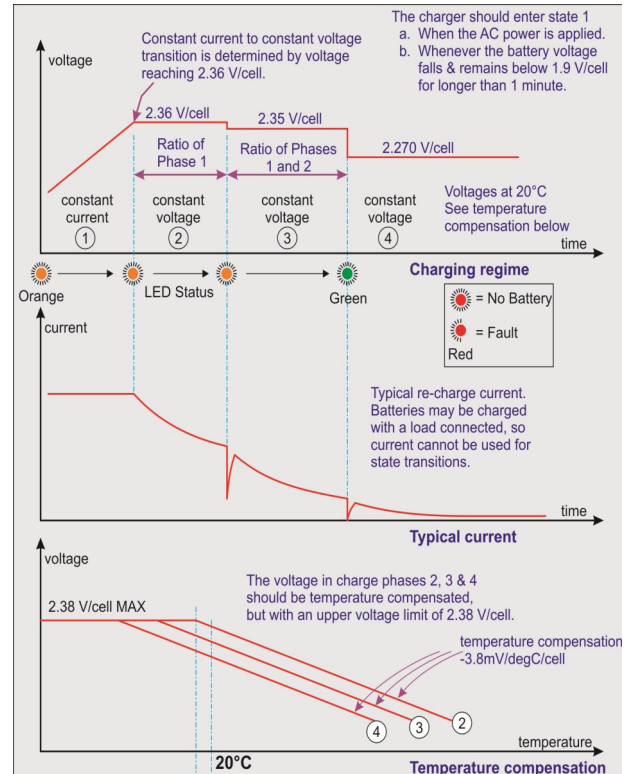
A remote sensor is available where the battery is located in a different climatic environment or long charging cables are needed.

High Specification Protection

The charger is equipped with many of the protection features not found in other chargers (see specification below)

Higher Output Voltages

The UPC 800 is available with higher voltages of 36V/20A, 48V/15A, 72V/10A and 96V/7.5A (based upon 230VAC input). These may be on extended lead-times.



Battery voltage	12V				24V	
Part number	96558	96568	96559	96550	96563	96551
Output current @230VAC	20A	30A	40A	50A	20A	30A
Output current @120VAC	10A (nom)	15A (nom)	20A (nom)	25A (nom)	10A (nom)	15A (nom)
Nominal power	285W	400W	570W	700W	530W	800W
Typical efficiency	88%					
Input voltage	90V-255V (45-400Hz)					
Dimensions & weight	220 (L) x 112 (W) x 73 (H) mm, 2.3kg					
Environmental protection	IP20					
Features	Power factor corrected					
Options	Remote status lamp panel 96590 , Remote Sense 2.5m 96591 , Remote Sense 20m 96593 , Power Supply Conversion 96592					
Charging regimes	Freely ventilated—VRLA GEL/AGM—power supply					
Operating temperature	-25°C to +40°C					
Storage temperature range	-55°C to +85°C					
Quiescent current	Switched off <2mA, current on 150mA					
Protection	Temperature controlled cooling fan, short circuit, reverse polarity, over/under input voltage, over temperature					
Connections	AC connection, PVC cord, 3 x 1.5mm ² DC Connection 2 x 10mm ² RK twin cable					
Mounting arrangement	Mounting straps as standard					
Standards	'E' mark type approval					