



Omnicharge

programmable automatic battery chargers

Description | The Omnicharge 12-40, 12-60, 24-20 and 24-30 are fully programmable, automatic battery chargers designed for professional applications.

Combining the latest technologies and the best available parts with years of power electronics design expertise, the Omnicharge battery chargers will deliver long life performance even in the most demanding applications. A unique active rectifier output stage ensures unmatched efficiency figures. Combined with active PFC, the Omnicharge battery chargers are very energy efficient. This will reduce running costs and guarantees a maximum charge current per AC Watt.

All Omnicharge models are equipped with advanced temperature compensated 4 stage charging programs. Standard available are Flooded, GEL and AGM charge programs. But users are also allowed to create a custom charging program for their specific battery, such as a Lithium based derivative, using the TBS Dashboard software. The standard available TBSLink port enables remote control and readout via the optional TBS Universal Remote Control.

All Omnicharge units are easy to install and come standard with temperature sensor and a very clear installation and operating instruction manual.

Features

- Two battery outputs
- Robust industrial design
- Designed for continuous duty charging
- Very efficient
- Universal power factor corrected auto ranging AC input
- No charge current derating at 115VAC input
- Protected against battery failure, high temperature, overload, short circuit, low input voltage and reverse polarity (fuse)
- Multistage intelligent charging programs
- Programmable charging programs up to 8 stages
- Protects the battery from being overcharged
- Variable speed fan for silent operation
- Remote on/off capability
- Alarm relay (optional Alarm Output Expander available)
- Remote control capability via TBSLink
- Easy to access connection bay for installing AC-, DC and control wiring
- Temperature sensor included
- CE certified
- 24 month warranty

Applications

- Recreational vehicles
- Marine applications
- Industrial systems
- Mobile entertainment systems
- Service vehicles
- Remote homes

Accessories

- DC cable kits
- Universal Remote Control with LCD¹⁾
- TBSLink communication kit including software
- Alarm output expander



Parameter	OC12-40	OC12-60	OC24-20	OC24-30
Input voltage	100-260VAC / 47-63Hz / PF ± 0.95			
Full load consumption	700VA	1050VA	700VA	1050VA
AC input current (115V/230V)	6A/3A	9A/4.5A	6A/3A	9A/4.5A
Full load efficiency	88%	88%	89%	89%
Nominal output voltage ¹⁾	12V		24V	
Total output current ^{1,4)} (Aux.)	40A(4A)	60A(4A)	20A(2.5A)	30A(2.5A)
Charge characteristic ²⁾	IUoUoP, intelligent 4-stage, temperature compensated			
Absorption voltage ²⁾	14.4V		28.8V	
Float voltage ²⁾	13.5V		27.0V	
Equalize voltage ²⁾	15.5V		31.0V	
Supported Battery types ²⁾	Flooded / GEL / AGM / Custom			
Recommended battery capacity ³⁾	80-400Ah	120-600Ah	50-200Ah	70-300Ah
DC current draw (charger off)	£ 5mA		£ 4mA	
Operating temp. range ⁴⁾	-20°C ... +50°C (humidity max. 95% non condensing)			
Storage temp. range	-40°C ... +80°C (humidity max. 95% non condensing)			
Cooling	Variable speed fan controlled by temperature and load			
TBSLink enabled	Yes			
Protected against	Low AC voltage, output short circuit, high temperature, battery overcharging and reverse polarity (fuse)			
Indications	Power on, output current bar, state of charge bar, error			
DC output connections	M8 bolts (main output), Screw terminals (auxiliary output)			
AC input connections	Screw terminals			
Enclosure body size	351 x 210 x 114mm			
Total weight	5.8 kg			
Protection class	IP21 (mounted in upright position)			
Standards	CE marked meeting EMC directive 2004/108/EC and LVD 2006/95/EC complying with EN60335-1, EN60335-2-29			

Note: the given specifications are subject to change without notice.

¹⁾ Maximum output current tolerance is +/-3%. Maximum setpoint voltage deviations are +/- 0.1V for 12V and +/- 0.2V for 24V models. All setpoint voltages are temperature compensated when battery temperature sensor is connected.

²⁾ Value is programmable

³⁾ Always consult battery manufacturers specifications for maximum allowable charge current

⁴⁾ At higher ambient temperatures (>40°C), maximum output current may be reduced automatically

Dimensions

