

Description



The Omnicharge 12-40, 12-50, 12-60 and 24-30 are fully programmable, dual output switch mode 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 battery chargers are equipped with advanced 4 stage charging algorithms and temperature compensation. Users are also allowed to create a custom charging algorithm for their specific battery, with the TBS "Dashboard" software. The standard available TBSLink port enables remote control and readout via the optional TBS Universal Remote Panel.

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 design
- ▶ Designed for continuous duty charging
- ▶ Very efficient
- ▶ Universal auto ranging AC input
- ▶ Power Factor Corrected
- ▶ Protected against battery failure, high temperature, overload, short circuit and low input voltage
- ▶ Spark free battery connection
- ▶ 4-stage intelligent charging algorithm
- ▶ Programmable charging algorithms
- ▶ Variable speed fan for silent operation
- ▶ Remote on/off capability
- ▶ Alarm relay
- ▶ Remote control capability via TBSLink
- ▶ Easy to access connection bay for installing AC-, DC and control wiring
- ▶ Temperature sensor included
- ▶ CE and e-mark certified
- ▶ 24 month warranty

Applications

- ▶ Recreational vehicles
- ▶ Maritime applications
- ▶ Industrial systems
- ▶ Mobile entertainment systems
- ▶ Electric vehicles
- ▶ Remote homes

Technical specifications

Parameter	OC12-40	OC12-50	OC12-60	OC24-30
AC input voltage	100 - 265V / 50Hz - 60Hz (auto ranging)			
Power factor	≥ 0.99			
Maximum input current (@ 115V nominal input)	6A	7.5A	9A	9A
Maximum input current (@ 230V nominal input)	3A	4.3A	4.5A	4.5A
Number of outputs	2 (one full current and one 4A output)			
DC output voltage	12V	12V	12V	24V
Charge current (@ 40°C)	40A	50A	60A	30A
Charge algorithm	4-stage with temperature compensation			
Standard bulk stage voltage (@ 25°C)	14.4V	14.4V	14.4V	28.8V
Standard float stage voltage (@ 25°C)	13.3V	13.3V	13.3V	26.6V
Battery drain current when charger is off	< 5mA			
Operating temperature range (ambient)	-20°C to +50°C			
Protections against	Short circuit, overload, high temperature, battery failure and low AC input voltage			
Indications	Power on, output current bar, state of charge bar, short circuit/overload, high temperature, battery failure, low AC input			
DC output connection	Two M8 studs (output 1), Screw terminal connector (output 2)			
AC input connection	Screw terminals			
Enclosure body size (L x W x H)	351 x 210 x 114mm			
Total weight	5.5 kg			
Protection class	IP21			
The charger complies with the following standards	EN61000-6-3 (EN55022), EN61000-6-2 (EN61000-2/3/4, EN61000-4-3), LVD 73/23/EEC (EN60335-1), e4-95/54/EC, RoHS 2002/95/EC			
Accessories	Temperature sensor 5m (included) TBS Universal remote panel (optional) RS232 / USB interface (optional) TBS "Dashboard" software (free) TBS Battery Management Controller (future option)			

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

Dimensions

