tbs electronics



e-xpert pro

High precision battery monitor

Description | The e-xpert pro selectively displays voltage, charge- and discharge current, consumed amphours, remaining battery capacity and time remaining of your battery bank. Using a clear backlit LC Display and an intuitive user interface, all parameters can be recalled with just a button press. A second battery input is also provided to monitor an auxiliary battery.

Defining the amount of energy available in a battery is a complex task since battery age, discharge current and temperature all influence the actual battery capacity. High performance measuring circuits, along with complex software algorithms, are used to exactly determine the remaining battery capacity. A new shunt selection feature enables the e-xpert pro to measure currents up to 10.000Amps.

The e-xpert pro is equipped with an internal programmable alarm relay, to run a generator when needed or to turn off devices when the battery voltage exceeds programmable boundaries.

The e-xpert pro comes standard with a 500 Amp shunt and a very clear installation and operating instruction manual.



Features

- Read your battery bank like a fuel gauge
- Provides critical information about the status of vour battery bank
- Displays voltage, current, consumed amphours, remaining battery capacity and time remaining
- Two battery inputs
- · Large display with backlight
- Quick nut mounting construction
- Fully programmable alarm relay
- Shunt selection capability, enables flexible system
- Communication/expansion port
- Stores a wide range of history events in internal
- Splash proof frontpanel
- 500 Amp shunt included
- CE and e-mark certified
- 24 month warranty



Applications

- Electric Vehicles
- Marine applications
- Solar power systems
- Industrial systems
- Electric forklifts
- Mobile entertainment systems
- Service vehicles
- Recreational vehicles
- Remote homes



Accessories

- Temperature sensor
- Professional connection kit
- Quick connection kit
- Isolated RS-232 interface
- Isolated USB interface
- Alarm relay output expander
- 1:5 voltage prescaler (active & passive versions)
- 1:10 voltage prescaler (passive version)
- Windows XP/Vista/7 software

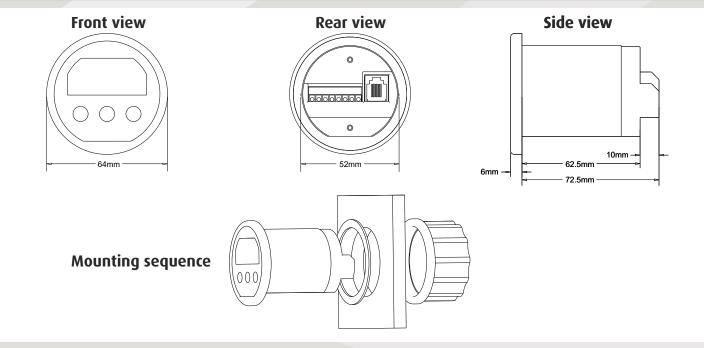


Technical specifications

Parameter		e-xpert pro
Supply voltage range		935VDC
Supply current ¹⁾ :	@Vin=24VDC	7mA
	@Vin=12VDC	9mA
Input voltage range (auxiliary battery)		235VDC
Input voltage range (main battery)		035VDC
Input current range ²⁾		-9999+9999A
Battery capacity range		209990Ah
Operating temperature range		-20+50°C
Storage temperature range		-30+70°C
Readout resolution :	voltage (035V)	± 0.01V
	current (0200A)	± 0.1A
	current (2009999A)	± 1A
	amphours (0200Ah)	± 0.1Ah
	amphours (2009990Ah)	± 1Ah
	state-of-charge (0100%)	± 0.1%
	time remaining (024hrs)	± 1minute
	time remaining (24240hrs)	± 1hr
	temperature (-20+50°C) ³⁾	± 0.5°C
Voltage measurement accuracy		± 0.3%
Current measurement accuracy		± 0.4%
Meter dimensions		Ø64mm (front diameter) / Ø52mm (body diameter) / 79mm (depth)
Meter weight		95gr
Shunt dimensions (length x width x height)		87 x 45 x 35mm
Shunt weight		145gr
Protection class		IP20 (frontpanel only IP65)
Standards		CE marked meeting EMC directive 2004/108/EC and LVD 2006/95/EC complying with EN60335-1, RoHS 2002/95/EC and e4-95/54/EC

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

Dimensions



¹⁾ Measured with backlight and alarm relay turned off
2) Depends on selected shunt. With standard delivered 500A/50mV shunt (350A continuous), the range is limited to -600..+600A

³⁾ Only available when optional temperature sensor is connected