tbs electronics

e-xpert lite

High precision battery monitor

Description | Operating your battery bank without good metering is like running your car without any gauges, although possible to do, it's always better to know how much fuel is left in the tank. Defining the amount of energy available in a battery is a complex task since battery age, discharge current and many other factors influence the actual battery capacity. The e-xpert lite uses the same very accurate measurement and calculation systems as the high-end e-xpert pro.

The e-xpert lite selectively displays voltage, charge- and discharge current, consumed amphours and remaining battery capacity. Using a clear backlit LCD 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. A large bargraph delivers instant state of charge information.

Compared to the e-xpert pro, the e-xpert lite is a more basic instrument, perfectly suited for users focused on accurate state of charge readout and very easy setup.

The e-xpert lite 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 your battery bank
- Displays voltage, current, consumed amphours and remaining battery capacity
- Two battery inputs
- Large display with backlight
- Quick nut mounting construction
- Programmable alarm relay
- Shunt selection capability, enables flexible system integration
- Autosensing battery voltage inputs
- Splash proof frontpanel
- 500 Amp shunt included
- CE and e-mark certified
- 24 month warranty

Applications

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

Accessories

- Professional connection kit
- Quick connection kit

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Technical specifications

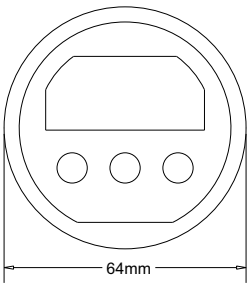
Parameter		e-xpert lite
Supply voltage range		9..35VDC
Supply current[1] :	@Vin=24VDC	7mA
	@Vin=12VDC	9mA
Input voltage range (auxiliary battery)		2..35VDC
Input voltage range (main battery)		0..35VDC
Input current range[2]		-999..+999A
Battery capacity range		20..999Ah
Operating temperature range		-20..+50°C
Storage temperature range		-30..+70°C
Readout resolution :	voltage (0..35V)	± 0.1V
	current (0..100A)	± 0.1A
	current (100..999A)	± 1A
	amphours (0..100Ah)	± 0.1Ah
	amphours (100..999Ah)	± 1Ah
	state-of-charge (0..100%)	± 0.1%
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.

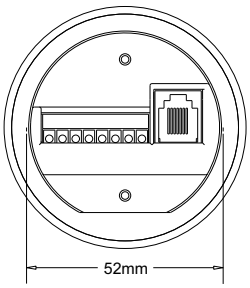
[1] Measured with backlight and alarm relay turned off
[2] Depends on selected shunt. With standard delivered 500A/50mV shunt (350A continuous), the range is limited to -600..+600A

Dimensions

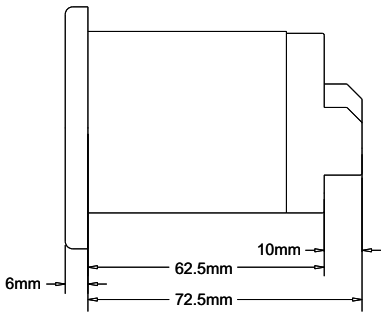
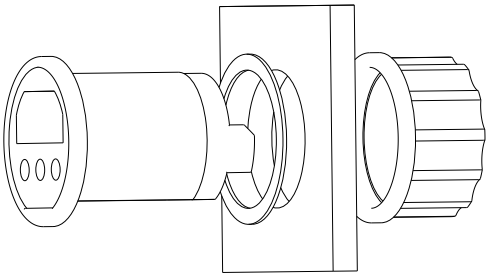
Front view



Rear view



Side view



Mounting sequence