

Smart Battery monitoring

A look inside the battery

When putting together a DC installation for a boat or yacht, there is more to take in to consideration than just the correct choice of battery and associated charging systems. All sorts of other items can have something to do with the battery or are connected to it and can significantly impact the end result.

Battery usage indicator - knowledge is power

The WBM is a universal battery monitor that displays the status of the battery with very high precision. Via the display, the following information is brought up:

- The main battery voltage (V)
- The power consumption indicated in ampere-hours (Ah)
- Power consumption in amperes (A)
- Charge current of battery charger, combi, solar panels, windmills, etc. (A)
- Battery capacity in %
- Remaining battery capacity and “time remaining” in minutes and hours (Pro Series)

The WBM provides a look ‘inside’ the battery and is essential for preserving long battery life.

Three versions

The WBM Basic version is identical to the PRO version, only without the “time remaining” indicator in hours and minutes. The PRO-HV is suitable for DC systems up to 70 VDC.

Automatic start function

The WBM can also be used as a means of automatically starting a DC or AC generator, based on the battery voltage or battery con-

dition. This is achieved via RS 232 communication (order RS 232 option) Please note that your generator must be suitable for this function. WhisperPower generators are equipped with an automatic start / stop adjustment kit as standard.

Remote communication

The WBM, fitted with the RS 232 option, can be used to remotely monitor power systems using a GSM or an internet connection.



Technical specifications WBM - Battery monitors



| | WBM-BASIC | WBM-PRO | WBM-PRO HV |
|---|-------------------------|-------------------------|-------------------------|
| Article Nr. | 40290310 | 40290311 | 40290312 |
| TECHNICAL SPECIFICATIONS | | | |
| Supply voltage range | 9 .. 35 VDC | 9 .. 35 VDC | 14.. 70 VDC |
| Supply current ¹⁾ at 24 VDC | 7 mA | 7 mA | 5 mA (at 48 VDC) |
| at 12 VDC | 9 mA | 9 mA | 6 mA (at 36 VDC) |
| Input Voltage range (auxiliary battery) | 2 .. 35 VDC | 2 .. 35 VDC | 2 .. 35 VDC |
| Input Voltage range (main battery) | 0 .. 35 VDC | 0 .. 35 VDC | 0 .. 70 VDC |
| Input current range ampere ²⁾ | -999 .. +999A | -999 .. +999A | -999 .. +999A |
| Battery capacity (min.. max) | 20 .. 999Ah | 20 .. 999Ah | 20 .. 999Ah |
| Operating temperature | -20 .. +50°C | -20 .. +50°C | -20 .. +50°C |
| Readout accuracy: voltage | ± 0.1V (0 .. 35 V) | ± 0.1V (0 .. 35 V) | ± 0.1V (0 .. 70 V) |
| current | ± 0.1A (0 .. 100 A) | ± 0.1A (0 .. 200 A) | ± 0.1A (0 .. 200 A) |
| current | ± 1A (100 .. 999A) | ± 1A (200 .. 999A) | ± 1A (200 .. 999A) |
| battery capacity | ± 0.1Ah (0 .. 100 Ah) | ± 0.1Ah (0 .. 200 Ah) | ± 0.1Ah (0 .. 200 Ah) |
| battery capacity | ± 1Ah (100 .. 999Ah) | ± 1Ah (200 .. 999Ah) | ± 1Ah (200 .. 999Ah) |
| start of charge (0..100%) | ± 0.1% | ± 0.1% | ± 0.1% |
| time remaining (0.. 24hrs) | | ± 1 min | ± 1 min |
| time remaining (24.. 240hrs) | | ± 1 h | ± 1 h |
| temperature (-20 .. +50°C) ³⁾ | | ± 0.5°C | ± 0.5°C |
| Voltage measurement accuracy | ± 0.3% | ± 0.3% | ± 0.3% |
| Current measurement accuracy | ± 0.4% | ± 0.4% | ± 0.4% |
| Housing material | ABS | ABS | ABS |
| Colour | RAL 7021 black grey | RAL 7021 black grey | RAL 7021 black grey |
| Dimensions: diameter front panel / cylinder | ø 64 mm / ø 52 mm | ø 64 mm / ø 52 mm | ø 64 mm / ø 52 mm |
| total depth / weight | 79 mm / 95 g | 79 mm / 95 g | 79 mm / 95 g |
| Shunt dimensions: base | 45 × 87 mm | 45 × 87 mm | 45 × 87 mm |
| height | 17 mm (basis) / | 17 mm (basis) / | 17 mm (basis) / |
| | 35 mm (cable connector) | 35 mm (cable connector) | 35 mm (cable connector) |
| weight | 145 g | 145 g | 145 g |
| International Protection rating | IP20 (front panel IP65) | IP20 (front panel IP65) | IP20 (front panel IP65) |

¹⁾ measured with backlighting and alarm relay switched off

²⁾ Subject to selected shunt. With 500 A/50mV shunt (350 A continuous) delivered as standard the range is -600..+600 A

³⁾ Only available if optional temperature sensor is connected

