



Smart Connections

BMU100 Enviroms Monitor



The BMU100 is a grid independent utility meter and enviroms monitor. Surface mounted and battery operated, it's easy to install anywhere, and runs for about 10 years on one battery. Data is transferred via a 3G/2G mobile data connection.

The BMU100 connects to pulse, Modbus and I2C sensors and meters, and can be further expanded to analog measurements.

Logging and transfer frequencies are set independently, to balance data and battery life requirements. . BMU100 uses the available 3G/2G bands for data transfer. ionSign provides a cloud service, also your own EMS or BMS may be used. Bespoke server integrations are easy to build.

Technical specifications

- Integrated dual-band 3G/2G module
- 4 open collector inputs for pulses OR
- 2 open collector inputs and RS485 Modbus
- Optional combined RH/T input
- Optional external temperature sensor input
- I2C bus for external sensors or the BMX8A measurement extension for analog inputs
- Local buffer of 13 000 measurement cycles for transfer network failures (135 days with 15min logging frequency)
- Expected battery life over 10 years with factory installed EVE ER26500M 3.6V 6Ah
- Compatible batteries e.g. SAFT LSH14 and ULTRALIFE ER26500M
- Reports battery voltage to server
- Operating temperature -25°C ... +55°C
- Operating RH 5%...95% non-condensing
- Flanged PC plastic enclosure IP65
- IP44 with cable glands for wiring
- (WxHxD 145 x 90 x 55mm)
- LoRa antenna included

Typical applications

- Condition and environment monitoring in off-grid locations, or for installation simplicity

Mobile user interface

- HTTP(S) protocol allows easy server interface and application development
- Easily configured with a single SMS message

Extra features

- Optional cloud service for reporting and device management