



OMC-042 GPRS Data Logger

The OMC-042 data logger is a small, rugged, ultra low power device. This small data logger was specifically designed for remote areas without mains power.

Internal

- QUAD-band GPRS-modem.
- Temperature sensor and power monitor.
- 2 GB micro SD card and a SIM card slot.
- 3.6 Volt Lithium battery or optional 8..30 Vdc external power, or 3xAA NiMH for integrated solar panel.

Sensors

- Seamless interface to all meteorological and hydrological sensor from Observator Instruments and many more.
- Supports all major standard interfaces and protocols like RS232, ModBus, NMEA and so on.
- Drivers are available for a large range of sensors.
- Other drivers will be created on request.
- Data from the sensors are stored on a micro SD card, before transmission.

Parameters & thresholds

Thresholds can be defined on all parameters. Whenever a parameter exceeds a threshold, an alarm is generated. This alarm can be send as a text message (SMS) to a mobile phone. The 'remaining battery capacity' is also measured as a parameter.

Data transfer

The measurement data stored on the 2 GB SD card can be transmitted periodically by GPRS. The logger supports:

- FTP and TCP/IP.
- Email and text messages (SMS).
- USB to a PC.
- Remote configuration (TCP over GPRS).

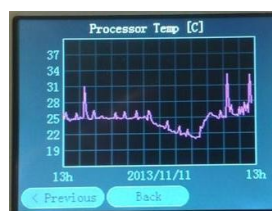
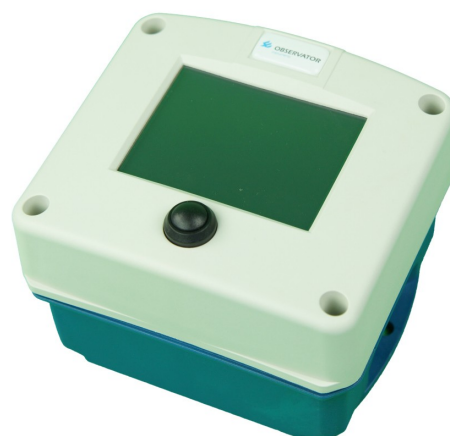
Data transfer is done in a simple ASCII file format. The file format is open.

Housing

The OMC-042 is available in four different housings, as shown on the next page. Each housing includes the logger, a battery, the GPRS modem and an antenna. So only the sensors are external and everything else is inside. (Exception: the OMC-042-03 version has an external antenna.)



OMC-042-01 with integrated solar panel installed on top of a borehole



OMC-042-02 with touch screen display

OMC-042

GPRS Data Logger

Features:

- 4x 4..20mA 12bit analog inputs.
- 4x digital inputs or pulse counters.
- 2x hi-res differential voltage inputs (not for -03 version).
- 1x RS-232 or RS-485/Modbus.
- 1x RS-232 or SDI-12.
- 100 mA@3.6V average current, 250 mA@3.6V average during data transfer, 50 uA@3.6V sleep current.
- 1x 12V@200mA switchable power outlet.
- Configuration using OMC-Programmer on USB port.
- Remote configuration possible using TCP.
- Rugged, waterproof (depending on the housing).
- Integrated GSM antenna (not for -03 version). External antenna optional.

Options

- OMC-042 Standard OMC-042 (IP-67).
 OMC-042-01 OMC-042 with solar panel (IP-67).
 OMC-042-02 OMC-042 with small touch screen display.
 OMC-042-03 OMC-042 with integration set for rain gauge.

Additional

- OMC-042-B Spare battery, lithium 3.6 V.
 OMC-042-AP Spare rechargeable battery set.
 OMC-040-002 Cable for external power supply, incl. converter 9-30Vdc to stabilized 3.6Vdc.
 OMC-040-004 USB configuration cable.
 OMC-Programmer Free Windows software for configuring the OMC-04X loggers.

Environment

Temperature range (operating) : -30 to +70 °C
 Temperature range (storage) : -40 to +85 °C

Dimensions

- OMC-042 standard : 130 x 120 x 75 mm (l x w x h)
 OMC-042-01 solar panel : 130 x 120 x 125 mm (l x w x h)
 OMC-042-02 display : 130 x 120 x 90 mm (l x w x h)
 OMC-042-03 rain meter : 160 x 80 x 55 mm (l x w x h)



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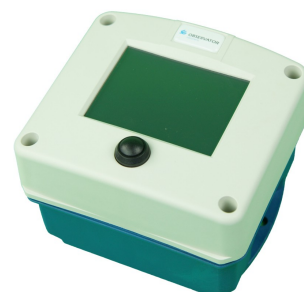
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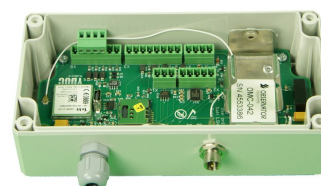
OMC-042 Standard housing.



OMC-042-01 with solar panel



OMC-042-02 with touch screen display



OMC-042-03 for integration in tipping bucket rain meters (OMC-210 and RIM series).