



OMC-045-III GPRS/UMTS Data Logger

The OMC-045-III data logger is a low power, high-end data logger with built-in GPRS/UMTS modem and GPS receiver. With its many input and output interfaces, this versatile logger can be connected to a broad range of sensors and other devices. The logger is very suitable for hydrological and meteorological measurement stations, including data buoys.

Internals

- GPRS/UMTS modem (before Q4/2016 only GPRS)
- GPS receiver
- Temperature and humidity sensor
- 2 GB SD card and a SIM card slot
- 4 MByte non-volatile internal memory

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 an 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.

Data transfer

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

- FTP
- Email and text messages (SMS)
- USB to a PC
- Iridium satellite communication (optional)
- Radio communication (optional)

Data transfer is done in a simple ASCII file format. The file format is open. Models delivered before Q4/2016 do not support UMTS (or 3G).



The OMC-045-III data logger



The OMC-045-III with housing and touch screen display



The OMC-045-III with Iridium modem

OMC-045-III

GPRS Data Logger

Features

- Four serial RS-232 I/O ports
- One RS-422/RS-485 port (shared with one RS-232 port)
- One Modbus (RS-485) port.
- Four analog 4-20 mA inputs, 12 bits
- One analog 0-10 Volt input, 12 bits
- One digital input
- One potentiometric input, 12 bits
- One pulse counter input
- Two relay outputs that can be switched on/off if a parameter is above/below threshold
- Four switched power outputs to power connected sensors (very useful in low-power applications)
- Programmable input and output drivers
- Internal temperature and humidity sensor to monitor the environmental conditions of the electronics
- Internal GPS
- Internal GPRS/UMTS modem
- Supports FTP, email, SMS and USB 2.0
- Programmable thresholds on all parameters

Options

- | | |
|-------------|--------------------------------------|
| OMC-045-H01 | IP67 housing with 12V 7Ah battery |
| OMC-045-H02 | Small IP68 housing |
| OMC-045-A06 | Iridium modem (requires OMC-045-M03) |

Many more options available!

Environment

- | | |
|-------------------|-------------------------------------|
| Temperature range | -20 to +70 °C (operating & storage) |
| Humidity | 10 to 90% |

Power

- | | |
|----------|-------------------------------|
| External | 8 to 24 Vdc |
| Current | <0.3 mA quiescent, 250mA peak |

Dimensions

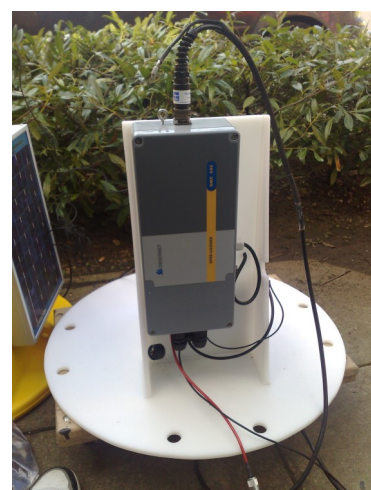
- | | |
|--------------|-----------------------------|
| Bounding box | 99 x 72 x 62 mm (l x w x h) |
|--------------|-----------------------------|



OMC-045-III in a meteorological measurement station



OMC-045 installed in the hull of the OMC-7006 data buoy



OMC-045-H02 housing with YSI connector



Rietdekkerstraat 6
2984 BM Ridderkerk

P.O. Box 60
2980 AB Ridderkerk
The Netherlands

Phone +31 (0)180 463 411
Telefax +31 (0)180 463 530
E-mail info@observator.com
www.observator.com

- Related products** (refer to our web site)
- | | |
|----------------|--|
| OMC-Programmer | Free Windows software for configuring the OMC-04X loggers. |
| OMC-042 | Ultra low power data logger. |
| OMC-DOL | Software for data collection and processing. |
| OMC-70xx | Data buoys (7006, 7012, 7018) |