

# OMC-045-III GPRS Data Logger

The OMC-045-III GPRS data logger is a low power, highend data logger with build-in GPRS 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 modem
- 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. 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.



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/GSM 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  $99 \times 72 \times 62 \text{ mm}$  (I x w x h)



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OMC-045-III in a meteorological measurement station



Related products (refer to our web site)

OMP-Programmer Free Windows software for configuring

the OMC-04X loggers.

OMC-040 Ultra low power GPRS data logger.
OMC-DOL Software for data collection and

processina.

OMC-70xx Data buoys (7006 and 7012)