

MIO alerta v2

CatM/NB-IoT SMS Alarm & Control

The MIO alerta v2 is an intelligent CatM/NB-IoT SMS alarm, control and data logging unit. With basic logic and timing functions, the unit is ideal for applications including but not limited to:

- Pump monitoring & control
- HVAC&R or coolroom monitoring and control
- Environmental monitoring
- Tank, dam or river level monitoring

The core of the device, is a Digi XBee 3 Cellular CatM/NB-IoT modem, that provides reliable communication and data transmission over long distances, making it a good solution for applications in remote areas where standard 4G cellular coverage is poor.

The device includes both a serial (RS232) and Bluetooth® connections for setup and configuration, the Bluetooth® function is particularly suited to installations where the unit is fitted in an awkward location.

The MIO alerta v2 can also communicate data and commands via MQTT, enabling monitoring and control of one or many devices from an IoT server application.



Unit without expansion board fitted

Main Features



Cellular Coverage



Expandable to 8



Expandable to 4



Expandable to 4



Basic Read/Write Functions



SMS Alarm & Control



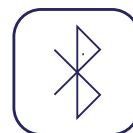
Control & Monitor from Server



Basic Data Logging



Wide Input Power Range



Program Windows App
Android App (BLE)

MIO alerta V2

CatM/NB IoT SMS Alarm & Control

Technical Data

Cellular Connectivity

LTE module for multi-regional use; Cat M1/NB1 deployed bands: 1*, 2, 3, 4, 5, 8, 12, 13, 18, 19, 20, 25, 26*, 28 (* roaming bands)

Hardware IO's

4 x Digital/Pulse inputs expandable to 8
1 x Analogue input expandable to 4
1 x Relay (latched) output expandable to 4
2 x Analogue Outputs

Digital Inputs

OFF or Logical State Low <0.5V
ON or Logical State High >2.5V

Relay Outputs

Max 30VDC 1A

Analogue Inputs

0-10V or 0-20mA/4-20mA

Interfaces

Serial Connections - 3.5mm Pluggable Terminal Blocks

1 x RS232 for Programming, Windows App

1 x RS232 (Spare, future use)

1 x RS485 (Modbus RTU, basic read write functions allows modbus register values to be logged or trigger alarms)

Power Connection - 3.5mm Pluggable Terminal Blocks

1 x SMA M (Cellular)

1 x Bluetooth® stub antenna, for Android App

SIM Size

4FF Nano

Power Supply

7* to 30VDC

* Note recommended to use 7.5VDC or higher refer user manual

Min 10W Power Source Recommended

Idle Connected to Network Typically <160mA at 12VDC

Rated Current CatM/NB IoT 550mA at 12VDC

Sleep Modem <1mA at 12VDC

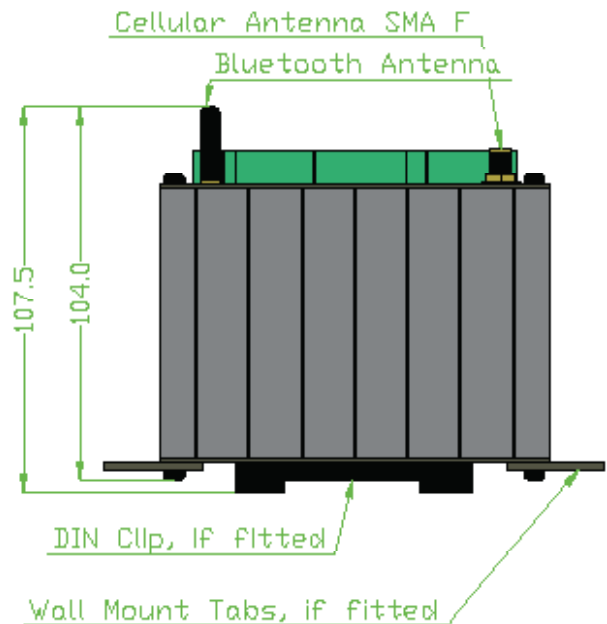
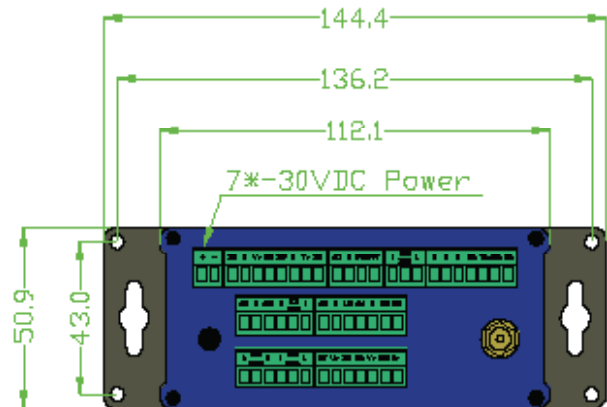
Physical/Environmental

Operating Temperature Range

-20oC to 70oC Non-condensing

Dimensions

112 x 108 x 51mm (DIN Mount Enclosure)



Unit with expansion board fitted