

Point Orange

IP68 rated GSM/GPRS or 3G based, low powered Remote Telemetry Unit with software configurable IO, integrated submersion sensor and Modbus master support.



SALES FLYER

Point Orange is a compact Logger/RTU device with integrated battery and GSM/GPRS or 3G modem, combining the versatile logging and telemetry functionality of the long-established Metasphere product range with the convenience of easy installation and rapid deployment using GSM, GPRS or 3G networks.

Point Orange provides real time remote monitoring of up to 5 programmable sensors. It has software programmable I/O functionality for hundreds of configurable combinations and includes support for Analogue, Digital and Counter Inputs. The Point Orange can also act as a Modbus master communicating over RS232 and RS485. In addition to the multiple configuration options the Point Orange offers local monitoring of battery voltage, cellular signal strength and ambient temperature.

The RTU offers a plug and play solution that minimises the need for additional site visits, with remote management functions including remote firmware upgrade enabling associated cost-savings. It can store thousands of records in memory for later retrieval by SCADA systems.

The Point Orange was designed from the outset as a self-contained, low cost fit-and-forget unit for use in harsh and hazardous environments in remote locations. Its design exploits mainstream technologies which help to minimise costs whilst at the same time ensuring reliability and a long product life. The latest developments in low power technology are employed, allowing the Point Orange to derive all the power it needs (including sensor power, if required) from an internal lithium battery pack. This, together with an integral GSM/GPRS or 3G modem, ensures a long service life with low infrastructure costs.



KEY FEATURES:

- Real time remote monitoring of up to 5 sensors
- Software Configurable I/O; supports AI, CI and DI
- Powers external current loop and active voltage sensors
- Built-in quad band GSM/GPRS or 3G modem with auto switching internal and external antenna
- Lithium battery with an expected life of 5+ years
- IP68 enclosure is submersible to 4 meters for 4 days
- Connects to Modbus or DNP3 Masters (e.g. ClearSCADA)
- Modbus master communicating over RS232 and RS485
- Remote firmware upgrade
- Remote configuration
- Integral immersion sensor
- Rich telemetry functionality including dynamic trending/logging and intelligent alarm reporting.
- Flexible integrated installation bracket
- Automatic external power source detection
- ATEX compliant variant available - Point Blue.

sensor collection storage processing interaction

Technical Specification

Analogue Inputs	Up to 4 channels Type: Active Current, passive current, active voltage, passive voltage Current range: 0-20mA Voltage range: 0-2V Input impedance: 10.2k Ω Accuracy: $\pm 0.5\%$ (Max $\pm 2\%$) Absolute maximum ratings: $\pm 5\text{VDC}$ Resolution: 16-bits
Digital inputs	Up to 5 channels Volt free 32-bit counter support up to 100Hz
Power	Internal Lithium battery pack Optional external battery pack DC power input (5-8V DC) Sensor power supply (12V DC, current loop or voltage)
Protocols	Modbus DNP3 (Level 3) Modbus master (RS232, RS485 full and half duplex)
Memory	4GB flash memory 512kB static RAM
Comms	Internal Quad band GSM/GPRS modem 3G option Auto switching internal and external antenna
Local monitoring	Ambient temperature sensor ($\pm 1^\circ\text{C}$) Integrated submersion sensor Battery, loop, and external supply voltages Automatic external power source detection and switching
Remote management	Remote firmware upgrade Remote configuration
Dimensions	156mm \times 110mm \times 112mm (excluding mating cables) 0.6 Kg (fully assembled)

Metasphere provides robust asset monitoring of time critical remote operations for operators to gain competitive advantage and meet regulatory compliance.



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