Point Orange

IP68 rated, GSM/GPRS based, low powered Remote Telemetry Unit with software configurable IO and integrated submersion sensor

Point Orange is a compact Logger/RTU device with integrated battery and GPRS/GSM 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 or GPRS 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, Counter Inputs and Digital Outputs. The multiple configuration options include local monitoring of battery voltage, GPRS 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 up to 250 million records in non-volatile memory ensuring data is secure in the event of a power loss.

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 helps 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 inexpensive lithium battery pack. This, together with an integral GSM/GPRS 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, DI and DO
- Powers external current loop and active voltage sensors
- External serial port for connecting intelligent sensors
- Built-in quad band GSM/ GPRS modem with internal antenna and optional external antenna
- Lithium battery with an expected life of 5+ years
- IP68 enclosure is submersible to 4 meters for 4 days
- Connects to Medina, DNP3 and WITS DNP3 Masters
- Remote firmware upgrade
- Stores up to 250 million records
- Integral immersion sensor for advanced warning of flood threat
- Rich telemetry functionality including dynamic trending/logging, flow rate calculations and intelligent alarm reporting.
- Flexible integrated installation bracket
- Automatic external power source detection
- ATEX compliant variant available – Point Blue.

sensor **collection** storage processing **interaction**

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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: $1M\Omega$
	Accuracy: $\pm0.5\%$ (Max $\pm2\%$)
	Absolute maximum ratings: $\pm5VDC$
	Resolution: 16–bits
Digital inputs	Up to 5 channels
	Volt free
	Impedance: $50k\Omega$
	64–bit counter support up to 1kHz
Digital outputs	Up to 2 channels
	Max load: 30V, 100mA
Power	Internal Lithium battery pack
	Optional external battery pack
	DC power input
	Sensor power supply (current loop or voltage)
Protocols	Medina
	DNP3 (Level 3)
	WITS DNP3
Memory	4GB flash memory
	512kB static RAM
Comms	Internal Quad band GSM/GPRS modem and antenna
	Optional external antenna
Local monitoring	Ambient temperature sensor ($\pm 1°C$)
	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 × 110mm × 112mm (excluding mating cables)
	0.6 Kg (fully assembled)

Specifications subject to confirmation.

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

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