Point Blue

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



Point Blue is an intrinsically safe, 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 Blue 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 Blue can also act as a Modbus master communicating over RS232 and RS485. In addition to the multiple configuration options the Point Blue 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 Blue is an ATEX compliant (to Zone 0), 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 Blue 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 Medina 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
- Non IS variant available Point Orange.



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: 10.2kΩ Accuracy: ±0.5% (Max ±2%)

Absolute maximum ratings: ±5VDC

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

Sensor power supply (12V DC, current loop or voltage)

Protocols Medina

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

Tri-band 3G option

Auto switching internal and external antenna

Local monitoring Ambient temperature sensor (± 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)

> IECEx BAS15.0027X Baseefa15ATEX0045X

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

