Point Blue

ATEX/ IECEx compliant IP68 rated, low powered Remote Telemetry Unit with software configurable I/O

Point Blue is an intrinsically safe, ATEX and IECEx certified compact Logger/RTU with a 3G modem with GPRS fallback, internal and/or external antenna, flexible I/O options, Modbus and SDI-12 master capability and a submersion sensor.

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 communicate with third-party serial devices over Modbus (using RS232 and RS485) or SDI-12. 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/ IECEx 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 used, allowing the Point Blue to derive all the power it needs (including sensor power, if required) from an internal or external lithium battery pack. This, together with an integral 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
- Tri-band 3G modem with quad band GSM/GPRS fallback 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, DNP3 or WITS DNP3 Masters
- Can operate in isolation uploading data to a FTP server
- Modbus master communicating over RS232 and RS485
- SDI-12 interface for third party serial devices
- Remote firmware upgrade
- Remote configuration
- Patented integral submersion 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
	Active AI power supply (12V DC, 21mA per channel)
	Input impedance: 10.2kΩ
	Accuracy typically: ±0.5% (Max ±2%)
	Absolute maximum ratings: ±5VDC
	Resolution: 16-bits
Counter inputs	Up to 4 channels
	Volt free, Impedance: 50kΩ
	32-bit counter support up to 100Hz
Digital inputs	Up to 5 channels
	Volt free, Impedance: 50kΩ
Power	Internal or external LTC battery pack
Protocols	Medina
	DNP3 (Level 2+ elements of level 3 and 4)
	WITS DNP3 v1.1
	Modbus master (RS232, RS485 full and half duplex)
	SDI-12 master
Memory	4GB flash memory and 512kB static RAM
Comms	Internal Tri-band 3G modem (850, 900, 2100 MHz) with quad band GPRS fallback (850, 900, 1800, 1900 MHz)
	Auto switching internal and external antenna
Local monitoring	Ambient temperature sensor (± 1°C)
	Integrated submersion sensor
	Battery, loop, and external supply voltages (± 2%)
	Antenna selection and performance
Remote management	Remote firmware upgrade and configuration
Dimensions	156mm × 110mm × 112mm (excluding mating cables)
	0.6 Kg (fully assembled)
Environmental	Operating temperature -20°C to +50°C
	Relative Humidity up to 95% non-condensing
	Protection classification: IP68 4m for 4 days
Certification	⟨Ex⟩ II 1G Ex ia IIB T4 Ga (-20°C ≤ Ta ≤ +50°C)
	Atex: Baseefa15ATEX0045X
	IECEx: BAS 15.0027X

BELL
Flow Systems