

Intelligens GNS

Intrinsically Safe Data Logger with Integral SMS/GPRS Telemetry



Key Features

- ✓ Single, internal pressure transducer.
- ✓ Intrinsically safe, ATEX approved (Zone 0)
- ✓ GPRS communication with SMS backup
- ✓ External high gain antenna
- ✓ IP68 environmental protection
- ✓ Accelerated dial in and alarm sampling
- ✓ 5-year standard battery life, user replaceable
- ✓ Advanced data logging regimes
- ✓ Large Memory Capacity
- ✓ Advanced alarm dial-out regime
- ✓ User replaceable SIM
- ✓ External power supply option
- ✓ Remotely configurable / firmware Upgradable
- ✓ Multiple alarm options

Overview

The Intelligens GNS logger has been developed by HWM to measure network pressures and more specifically pressures at governor stations, it's a competitively priced logger that meets all of the data generation and management needs of your network.

The Intelligens GNS has been designed to reliably and securely transmit continuous data. The internal pressure sensor can be paired with an additional (or multiple) external pressure sensor allowing for accurate measurements across a broad range of pressure combinations. The Intelligens GNS is designed for use at pressure reduction points across the network, ensuring that maximum design pressures are not exceeded without ever compromising a reliable supply.

The dual input functionality of the system means it can be used in combination with digital sensors including pressure/temperature sensors and simple contact switches. Intelligens GNS has been designed to work safely and efficiently in hazardous areas and is certified ATEX/IEC to Zone 0. It is perfect for monitoring regulating stations and extremity points.

Together with its versatile telemetry options, robust construction and long battery life this makes Intelligens GNS well suited to "fit and forget" operations in remote or hard to access locations.

Easy Installation

Intelligens GNS is supplied with user friendly PC based installation software, as well as user replaceable SIMs

Improved Visibility

The Intelligens GNS is an ATEX Level 0 telemetry data logger which transmits data from the sensor via GPRS. Two-way connectivity enables the unit to be reprogrammed remotely without the need for expensive site visits. New alarm conditions can trigger an alert to up to 16 specified telephone numbers, and the device can provide accelerated dial-in and sampling functionality during such events to make data rapidly available. This enables operators to respond promptly to changing levels.

Highly Versatile

Intelligens GNS is equipped with additional channel capability for logging temperature, additional pressure or flow if required.

Extended Battery Life

Low power electronics enable the typical five year battery life to be maintained even with increased transmission rates on alarm. The Intelligens GNS has been designed so that the batteries can be replaced. The unit accepts appropriately rated external sources such as battery packs or solar power, extending the longevity of the system and potentially increasing the data transmission frequency.



Dual input Functionality

Sensor Input Options	Digital	Up to 4 user configurable pulse/status inputs
		Contact closure type or other pulse input
		Up to 128 pulses per second
	Pressure External	100mBar to 100Bar 0.5% FSD available on request
	Temperature	PT100 -40°C to 140°C (2/3/4 wire compatible)
Control output ports	Digital	2 independent configurable outputs.
Logger Features	Rating	ATEX/IEC certified to Zone 0
	Memory	Primary recording 2 million readings (larger sizes available on request) Future proof in field local and remote upgradable software
	Analogue	Variable sample rate 1s to 24hrs
	Alarms Logger ID	Multiple Lower/Upper Limit, Min Flow, Rate Of Change, Channel Difference, In/Out of Band alarm types.
	Clock	On board 24 hour synchronized real time clock with date facility
	Secondary channel	Can be programmed to record either fast data, average minimum, average maximum or time interval between pulses (for data smoothing)
	Internal Cellular modem	GPRS can send data down to every 5 mins (*please note this may affect battery life)
	Dimensions (mm)	Tough ABS plastic enclosure 200H x 97W x 88D
	Weight	1kg
	Operating Temp	-20°C to +60°C (-5°F to +140°F)
	Ingress protection	IP68
Communication	Internal Cellular modem	User Replaceable Lithium Thionyl-Chloride battery pack operational for 5 years + under standard operating conditions*, complete with low battery alarm External power available with a suitable ATEX certified power source (option)
		GPRS to HWM DataGate or customer specific server. SMS Back Up* SMS to HWM DataGate or customer modem. Multiple messages per day. Quad band modem suitable for 850/900/1800/1900MHz bands. (3G option)
	Accelerated Dial In	Dial-in rate is increased if alarm situation is triggered. Logger can accelerate dial-in at alarm level for multiple applications – including SonicSens, Flow, Pressure, and other alarmed sensors.

** Typical battery life expectancy is based upon achieving network registration regularly and with ease. If the GPRS-enabled network registration is unachievable, the GPRS logger will convert to SMS-only operation after 24 hours and will attempt to re-establish GPRS communication when possible. A signal strength test should be performed during installation.*