Cello GS4



A cost effective, easily deployable, remote telemetry outstation providing a scalable universal solution for monitoring critical parameters in gas distribution networks.

Multiple site parameters are monitored, recorded and transmitted over 2G (SMS/GPRS), NB-IoT and LTE Cat M1 networks, providing a comprehensive multi-application solution for the Gas Industry.

Key Features

- Suitable for Regulator Stations, recording pressure, temperature, flow, valve operation and filter differential pressure
- Flexible communication build options supporting either 2G / NB-IoT / LTE Cat M1
- Build options for accommodating up to three integral pressure transducers, five digital (digital or analogue), temperature and back-lit LCD
- Bi-directional communication and remote configuration
- Operable as a Low Pressure Point (LPP) for profiling control in conjunction with Gascore
- Supports clocked pressure control when interfaced with Technolog's VAM modules
- Internal temperature sensor for measuring and recording ambient temperature

- Advanced channel profile and threshold alarms
- Low power design providing typically
 5 year battery life
- External Antenna with automatic detection and switchover
- Tilt sensor to aid detection of movement
- Intrinsically safe for Zone 0 deployment









Technical Specifications



Pressure Input	Channels: Up to 3 Ranges: 0 - 75, 0 - 100 mbar; 0 - 10, 0 - 300 KPa; 0 - 3, 0 - 7, 0 - 10 bar (contact Technolog regarding availability of alternative pressure ranges) Resolution/Accuracy: 8 bit, +/- 0.5% of Full-Scale Span Pressure ports: Female 1/4" or 1/8" BSP taper thread
Electrical Input / Output Options	Temperature channel: 1 Requires input from external Pt-100 3-wire sensor Input channels: 5 Monitors ON/OFF status of volt free contacts Monitors Pulse (Flow) inputs: Pulses counted over and recorded at pre-set intervals. Maximum rate 25 pulses per second (Maximum count 16,000 pulses per logging interval) Control Outputs: 2 Support for connecting up to two Valve Actuation Modules (VAM)
Modem	Integral antenna: Optional external antenna - Support for 2G, NB-IoT and LTE Cat M1 frequencies (subject to build option) SIM: User replaceable SIM card
Data Transmission	Type: 2G, NB-IoT and LTE Cat M1 networks (subject to build option) Interval: 1 min to 1 month at programmable date and time
Memory	Size: 512K, allocable between channels as required (max 64K per channel)
Clock	Type: Crystal controlled calendar clock with leap year adjustment Option to synchronise to cellular network or server
Supply	Battery Life: Typical battery life 5 years dependent on mode of use - Internally powered by an approved, replaceable lithium battery pack - Internal back up cell maintains logging function and local communications
Recording	Interval: Programmable between 1 second and 1 hour Digital inputs: Time based or event driven Data storage: Rotating store or store until full
Pressure Sampling	 Point sampling mode: Data recorded at each recording interval Average sampling mode: 1 second sampling over recurring interval with mean data storage Statistical recording (mean, max, min & standard deviation) on standard resolution pressure/analogue channels
Alarm Dial-Out	 High / low alarms independently programmable on each channel Continuous, time window and profile modes of operation Option to transmit data more frequently after an alarm
Certification	Intrinsically safe to Ex ia IIC T4 Ga (Ta -20 to +60C) / Zone 0 Certificate numbers Sira 19ATEX2140X / IECEx SIR 19.0044X
Environmental	Operating ambient temperature: -20°C to +50°C Protection classification: IP66 (installed in accordance with manufacturers guidelines)
Connectors	Communications: M12, 4 pole, single keyway, stainless steel Signal inputs: Digital and temperature input via 19-way - Mil Spec compatible
Mechanical	Dimensions (including handle/mounting bracket): 285 x 159 x 106 mm (excluding external antenna) Weight: 1.500 kg