

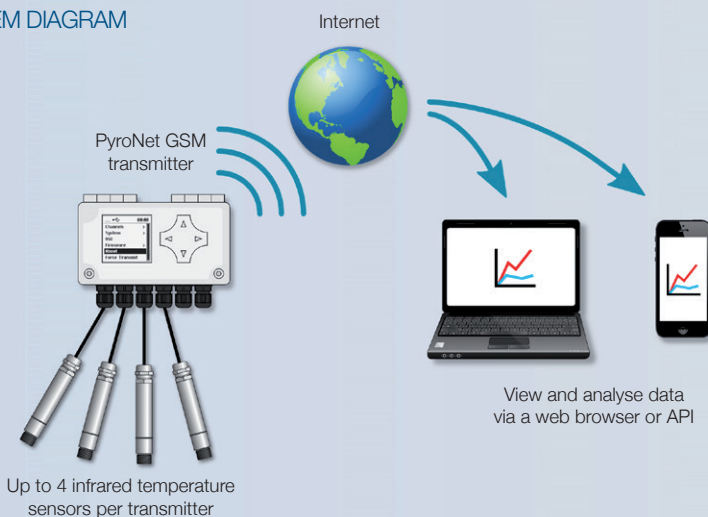
PyroNet GSM

Remote Sensor Telemetry System



- Monitor temperatures from anywhere in the world
- Unit transmits measurement data to the internet via cell phone network
- Up to 4 sensor inputs per unit
- View, analyse and download data via the hosted web interface

SYSTEM DIAGRAM



The PyroNet GSM telemetry module transmits readings from up to 4 devices with analogue output, such as the PyroCouple and PyroMini infrared temperature sensors.

Measurements are taken at regular intervals and transmitted to the internet via the GSM cellular phone network, using the PyroNet GSM's built-in SIM card.

Our hosted web interface, PyroNet GSMView, allows you to access and analyse data anywhere in the world via the internet.

A choice of battery-powered, solar-powered or 6-24 V DC-powered versions is available for indoor or outdoor use - contact Calex for advice.

Optional relay outputs rated 30 V DC, 2 A are available for connection directly to alarm hardware.

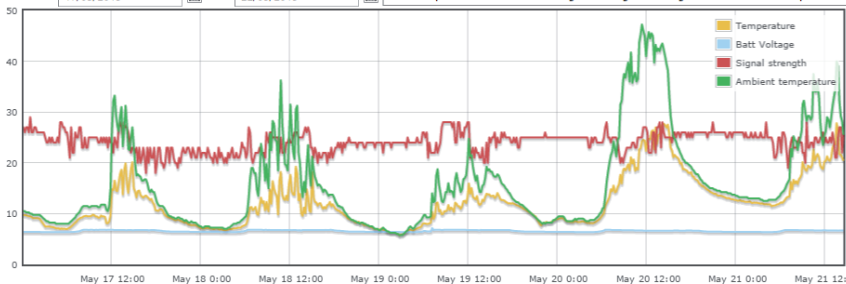
CALEX
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PyroNet GSMView

Dashboard Devices

Readings for Turbine 1 Main Bearing

Between 17/05/2015 and 22/05/2015 Temperature Batt Voltage Signal strength Ambient temperature



Date Recorded Utc	Temperature (Deg C)	Batt Voltage (Volts)	Signal strength	Ambient temperature (°C)
22/05/2015 14:31:32	20.39	6.68	26	25.5
22/05/2015 14:20:31	21.12	6.68	22	28.25
22/05/2015 14:09:31	21.63	6.67	27	29.25
22/05/2015 13:58:26	21.71	6.67	27	32.25
22/05/2015 13:47:26	26.4	6.66	25	39.25
22/05/2015 13:36:31	27.82	6.67	21	40
22/05/2015 13:25:31	27.82	6.67	21	34.5

PyroNet GSMView

- View and export data via a web browser
- Configure the PyroNet GSM unit remotely
- API included for third-party data export
- See configurable graphs
- Send alarms via email

PyroNet GSMView is a web-based interface for data acquisition and analysis. Your data is hosted securely on the PyroNet GSMView servers and access is included as standard in your monthly subscription.

You can export measurement data to be used in a spreadsheet, and configure the system to send email or SMS alarms, for temperature alerts or loss of communication (for example, due to power failure).

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GENERAL SPECIFICATIONS

Inputs

4 x analogue inputs, selectable 0-20 mA, 4-20 mA, 0-5 V, 0-10 V or digital ON/OFF

Optional plug-in board with 5 x digital or pulse inputs - contact Calex.

Compatible with

PyroCouple, PyroMini, PyroUSB, or any other sensor with analogue voltage or current output

Input resolution

10 bit (1024 increments) over 10 volts

Accuracy

0.25%

Sample rate

Configurable depending on data subscription (typically 1 transmission per 10 minutes, or 1 transmission per hour)

Outputs

-R models: 2 relay outputs rated 30 V DC, 2 A

Display

40 x 40 mm, 128 x 128 pixel resolution, backlit

Programming interface

USB port for configuration and firmware updates

Firmware updates

Via USB or GSM network

Warranty

2 years

ELECTRICAL

Input connector

Removable screw terminals, pitch 3.81 mm. 4 x 3-pin connectors for sensors, 1 x 2-pin connector for power

Power supply

3.9 V battery (-B models) or 6-24 V DC, 0.5 A (-DC models)

Output power to sensors

3.9 V (unregulated), 5 V or 21.6 V

Output current to sensors

31.25 mA max.

ENVIRONMENTAL

Environmental rating

IP67

Dimensions

138 x 76 x 68 mm (excluding cable glands)

TELECOMMUNICATIONS

Approvals & Conformity

Conforms with R&TTE Directive; GE, GCF, FCC, PTCRB, IC, ANATEL approved

Modem type

Quad-band GSM & GPRS 850/900/1800/1900 Mhz

Output power

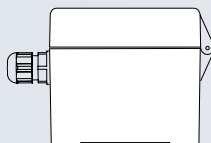
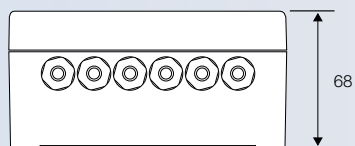
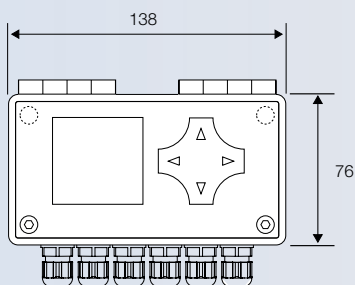
Class 4 (2 W) 850/900 MHz

Class 1 (1 W) 1800/1900 MHz

Antenna

Internal antenna built in as standard. Optional external antenna via SMA connector

DIMENSIONS (mm)



ORDERING

PyroNet GSM telemetry transmitter with 4 analogue inputs, IP67 weatherproof enclosure, built-in display, GSM modem for GPRS or SMS communications and internal antenna



PGSM - XX - X

Relay Outputs
(blank) = No relay outputs
R = 2 relay outputs rated 30 V DC, 2 A

Power Supply
DC = 6-24 V DC
B = Internal 3.9 V battery
S = Solar panel, backup battery and regulator

OPTIONS AND ACCESSORIES

PGANT External antenna with connection kit

PGBAT Battery, 3.9 V, 16 Ah, non-rechargeable, with built-in secondary cell. For PGSM-B models.

Monthly Subscriptions

Subscriptions include a SIM card, access to PyroNet GSMView, and a daily allowance of 24 transmissions (1 per hour) or 144 transmissions (1 every 10 minutes) as standard. Other options are available.

Optionally, alarm events may be transmitted by SMS and email.

Contact Calex to discuss your requirements.

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Issue A - Jun 15
Specifications subject to change without notice