TECHNOLOG

Newlog 3 - Universal Data Logging Module

Newlog 3 is a universal data logger with 8 channel capability. Each channel can be set to perform a variety of tasks such as measuring voltage, totalising events, counting pulses, detecting changes in the state of logic signals and measuring signal frequencies.

- 128K of data memory. Store until full or rotating store modes
- Notepad area for storing specific application information
- Internally powered and housed in a robust, fully weatherproof enclosure
- Battery life for > 5 years
- Compatible with Technolog's communication and configuration software for PCs and PDAs
- Optional PSTN modem available

Memory

128 Kilobytes (max 64K per channel) of data memory. Data compacting technique (threshold recording) may be enabled to optimise memory usage.

Programming

Newlog may be configured at Technolog if the logger is to be used for a specific application or be programmed by using configuration files which are supplied on request.

High Reliability

Newlog is totally sealed from the external environment. There are no fragile components such as displays, switches, keypad, or plug-in modules. All connectors are military specification standard. Electrical inputs and outputs are protected against misuse, cross connections, and failure of other equipment.

Low Cost

Newlog can be deployed in large scale surveys where conventional recording equipment would prove too expensive.

Data Retrieval

Data stored in Newlog may be transferred onto a computer using Technolog's support software

- Newlog an be exchanged in the field by site maintenance staff and later returned for data downloading and analysis by qualified staff.
- Newlog can be read by a notebook PC or pocket computer and remains on site permanently.
- Newlog can be linked to the telephone network.

Applications

Water Industry

Water quality parameters
Sewer flow
Rain gauging
River, reservoir and borehole water level
Pump duty monitoring
Low power telemetry

Gas Industry

Gas flow
Temperature
Pressure and telemetry outstations

Others applications

Energy management
Meteorology
Traffic counting
Industrial plant monitoring
Offshore and marine systems
Pollution and environmental studies

Additional Features

Alarms

Dial-out alarms including threshold and regular, supported when used with a suitable modem. Alarms can be set on all 8 channels and will operate on all types of input except event.

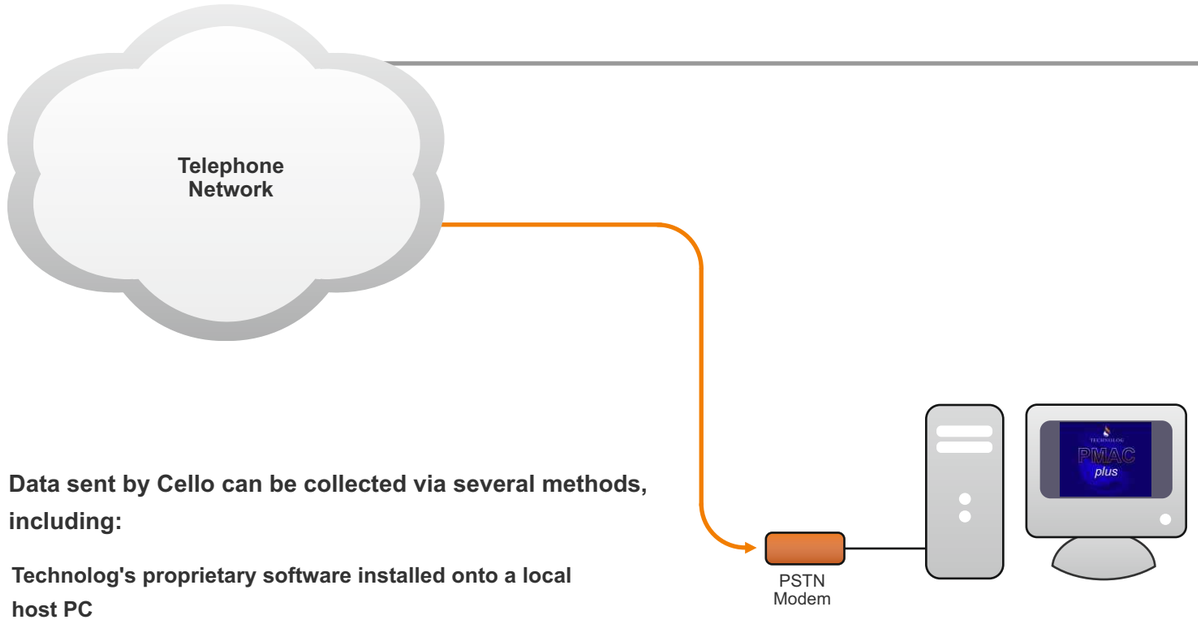
Index Registers

Index registers continuously totalise pulses on count channels, even when in standby.

Control outputs

Newlog has two control outputs which may be used as follows:

- To switch power to external instruments prior to taking a measurement.
- To provide a contact closure when preset threshold limits are exceeded.



Data sent by Cello can be collected via several methods, including:

Technolog's proprietary software installed onto a local host PC

Technolog's software provides powerful tools for graphing, analysing and exporting data into other formats, including facilities to securely share and transfer data between one server and another over an IP or dial-up connection.

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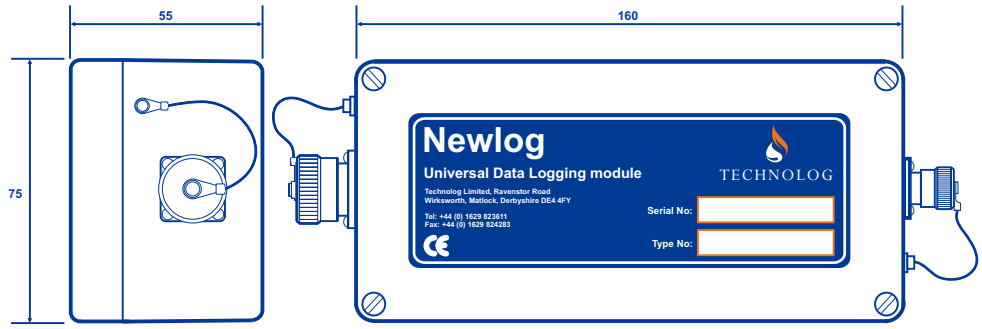
Technical Specifications



Input Number of channels: 8

Channel types: Voltage, event, state, count, frequency (independently selected on each channel)

Input impedance: > 300 kΩ

Input protection: Protected against reverse connection and over voltage

Voltage input: Range 0 to 2.5 volts, .01 volt accuracy and resolution

Event input: Switch closure or logic pulse, date and time of event stored, resolution 1 second or 10 seconds

State input: Switch closure or logic state

On state change, date, time and new state are stored, resolution 1 second or 10 seconds

Count input: Switch closures or logic pulses, maximum rate 10 per second

(Counted over and recorded at preset intervals) 16,000 maximum per logging interval

Frequency input: Switch closures or logic pulses, maximum frequency 16kHz, programable sampling period of 1 to 250 seconds, independent of recording rate. Resolution 0.01% maximum

Output 2 independent digital outputs for transducer power control and alarm signalling (0 and 3 volt levels, active low, 100k output impedance)

1 fixed output for 'open collector' signal bias (3 volts, 33k output impedance)

Serial port Type: Optically isolated, full duplex, asynchronous

Data rate: 1200/1200 baud transit/receive

Memory Type: Solid state

Size: 128K, allocatable between channels as required (max 64K/channel)

Data retention: 5 to 10 years (ie. life of logger)

Clock Type: Crystal controlled calender clock, with leap year adjustment

Accuracy: 100 seconds per month maximum error over operating temperature range

Supply Type: Internally powered by single lithium cell, factory exchangeable

Life: Typical battery life 5 to 10 years depending on mode of use

Recording Recording interval: Programmable between 1 second and 12 hours

Logging method: Time based or threshold logging

Start/stop control: Local or remote control via serial port. Presettable start up to 1 month in advance

Data storage: Rotating store or store until full

Environmental Operating temperature: -20°C to +50°C

Protection classification: IP6,8 submersible to 2 metres for unspecified period

Connectors 12-way input/output, 4-way serial port, compatible with MIL-C-26482

Dimensions 160mm(l) x 75(w) x 55(h)

Weight 1kg

Mounting: Two fixing holes in base, tapped M4

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For further information contact:

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