DATASHEET

GeoLogger G8 Module

The Geosense GeoLogger G8 is a versatile low power multi-channel data logger module which is capable of being used with a wide range of sensors with outputs which include VW, V, mV/V, 4-20mA, Pt100, NTC

GEOSENSE

GeoLogger G8 Module

Overview

The Geosense GeoLogger G8 is a versatile low power multi-channel data logger module which is capable of being used with a wide range of sensors with outputs which include VW, V, mV/V, 4-20mA, Pt100, NTC.

It can manage multiple sensors through the use of multiplexers which provide the electric signal of the sensors to the management module. Each system manages from 1 to 510 multiplexers for a maximum total of 16320 channels.

A graphical interface, compatible with all browsers (Windows, Linux and Mac) plus 'tablet', 'smart phones' or 'smart TV', allows configuration and reading of data from the module in an easy and intuitive way. All configurations can be implemented either locally or remotely through the integrated display and 12 buttons keypad or via the web server. All the configuration and working parameters are saved on the SD card.

It can be powered by either mains or battery and the 'Smart' power management contained within the GeoLogger G8 module allows it to be used with a battery to give an average life of at least one year in the basic configuration.

The GeoLogger G8 also visualises an internal FTP server, so it becomes also possible to download data over a local network or remotely via Internet. It can be also configured as FTP client to download automatically data to an FTP server.

APPLICATIONS

Remote automatic monitoring and alarm notification using a wide range of sensors typically used in:

- Dam monitoring
- Tunnelling
- Deep excavations
- Slope stability
- Structural monitoring
- Pile testing
- Bridge monitoring
- Groundwater level monitoring

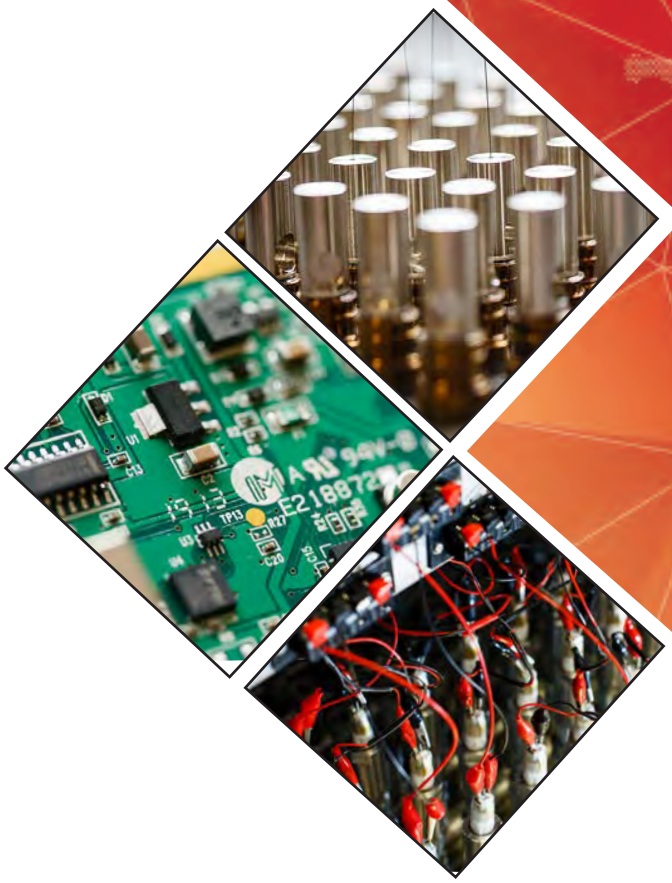
FEATURES

- VW inputs
- Digital inputs
- Analog inputs
- Voltage outputs
- Graphic display and 12 button keypad
- Alarms
- In-built lightning protection (TVS)
- Radio interface
- Radio interface
- Ethernet port
- SD card
- USB interface

GeoLogger G8 Module

Specifications

DATA LOGGER MODULE	
Power input	12Vdc. Optional 110/220Vac or solar panel
Operating power consumption	60mA
Standby power consumption	30µA
Digital inputs (2 channels)	Trigger / Pulse counter / Frequency
Analogue inputs (2 channels)	4-20mA / 0-3Vdc / 0-10Vdc
Digital outputs (2 channels)	Alarm, Relay contact max 24VAC/DC 3A
Communication ports	1 Ethernet, 2 x RS-485 isolated 2 x RS-232
Communication	Dust Network external radio module, FTP local server (FTP access to the module), FTP client (automatic data download to the FTP server)
User interface	12 button keypad, 128 x 64 backlit LCD display,
Internal clock	3V lithium battery TIMEKEEPER
Memory type	SD card, USB memory-stick
Sampling intervals	Pre-set 1/59min - 1/23h - 1/10days
Data acquisition method	Locally via SD card, USB memory stick
Remote data download	Via GPRS/UMTS, Ethernet, Local Web server with module remote control
Download intervals	1/59min - 1/23h - 1/10days
Data acquisition storage	>2,000,000 in the maximum configuration
Read/write data frequency	1MHz
Operating temperature	-20 to +70°C
Dimensions L X W X H	159 x 110 x 54mm
Weight (excluding battery & enclosure)	452g
Enclosure	IP67
MULTIPLEXER	
Channel numbers	4+4, 8+8, 16+16
Total multiplexers	Up to 256 for RS-485 port, Max 512
Total channels	32 for MUX, max 16320 channels
Inputs	V, mV/V, 4020mA, VW, Pt100, NTC
Resolution	24 Bit V, mV/V, 4-20mA, Pt100, NTC 0.1Hz
Supply voltage	+20V, +12V, ± 12V, +5V
Communication	RS485, Dust network
Dimensions L X W X H	120 x 115 x 25 (per module)
Weight	280g



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