



RELIABLE TURNKEY SYSTEM  
READS MOST TYPES OF SENSORS  
VERSATILE & MODULAR

The **SENSLOG** datalogger is a turnkey system used for remote monitoring of virtually any type of instrument.

### Description

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The **SENSLOG** datalogger is a turnkey system used for remote monitoring of virtually any type of instrument. It offers a wide range of data retrieval options, from removable storage modules to cellular telephone, radio, and satellite.

Once the instruments and the **SENSLOG** system are installed, site presence is not required. All functions can be controlled remotely.

The **SENSLOG** is well suited to logging data from instruments located in isolated, inaccessible or harsh environments that may also undergo extreme climatic changes. It offers reduced system costs, powerful software and efficient telecommunication links.

This system is supplied with a complete software package as well as custom, designed programs to gather, process, store, forward and analyze instrument data. The capacity of the **SENSLOG** can be expanded from its basic 16 channels of single-ended inputs.

### Key Features

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- Fully programmable, directly or remotely
- Usable in harsh environments
- Rugged and compact
- Battery- or solar-powered
- Alarm and control functions
- Research grade performance
- Reads most common type of instruments including any type of vibrating wire transducers

### Applications

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- Dams and bridges
- Steel or concrete structures
- Tunnels
- Mines

### Specifications

#### ELECTRICAL

##### Analog input

Number of channels	8 differentials or up to 16 single-ended. Each differential channel may be configured as two single-ended channels
Channel expansion	The RTX-MUX 16/32 multiplexer allows up to 32 single-ended channels to multiplex into four SENSLOG single-ended channels

##### Excitation output

Description	3 switched excitations, active during measurement, with one output active at a time. Non-active outputs are high impedance
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##### Pulse counter

Number of pulse counter channels	2 8-bit or 1 16-bit; software selectable
Digital I/O ports	8 ports, software selectable as binary inputs or control outputs 3 ports may be configured to count switch closures up to 40 Hz

##### System power requirements

Voltage	9.6 to 16 Vdc
Typical current drain	1 mA quiescent, 13 mA during processing, and 46 mA during analog measurement
Batteries	12 V. Several power supply options are available from the manufacturer Model CR2430 lithium battery (for clock and RAM backup) capacity: 270 mAh

#### MECHANICAL

Dimensions	41 × 36 cm
Basic kit (includes)	12-V battery, RTS-127 charger, MCM CR-10 Additional room required for connectors
Weight	12 kg

### Ordering Information

Roctest will assist you in selecting the right SENSLOG for your Data Acquisition System. Its modular construction will fit all your needs.

Please specify:

- Number of channels
- Type of power
- Communication needs

### Optional Accessories

**Multiplexer:** The RTX-MUX 16/32 multiplexer sequentially connects up to 32 sensors to the measurement and control module. The RTX-MUX 16/32 is housed in a weather resistant indoor/outdoor enclosure of fiberglass, baked enamelled steel or stainless steel.

**Telephone modem:** The COM220 is a modem employing the Hayes AT command set with user selectable baud rates of 9600 to 115200 baud. Its primary use is a remote site modem connected to a SENSLOG datalogger. The modem is powered and enabled by the datalogger. When not active, the COM220 draws less than 120 µA from the datalogger's power supply. The COM220 is designed to be used with standard analog telephone lines only.

**Short-haul modem:** Two required. An asynchronous modem used for local communication between a SENSLOG datalogger and a computer with an RS-232 serial port. Uses an unconditioned 4-wire telephone line; operates at data rates up to 19200 baud.