

SensorData Sigfox

Sigfox Data-Logger with SDI-12, I²C, Digital Inputs, Analogue Inputs, GPS, Ultra-long Battery Life, in a Waterproof Housing

enabled by  sigfox



APPLICATIONS



Soil moisture probes



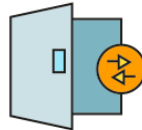
Temperature / cold-chain



Asset location



Tank levels



Door open / close



Meter pulse counting



SensorData is a battery-powered data communicator that interfaces to a range of sensors, GPS, inputs and outputs, and uploads data via the Sigfox network. Great for agriculture and remote sensor monitoring applications.

FEATURES

- Up to 5 years once daily update
- Up to 2 years of hourly updates
- SDI-12 interface to soil moisture probes, temperature, EC and others
- I²C interface for a wide range of sensors including: Temperature, Humidity, Vibration, CO₂ gas and many others
- Configuration via USB cable and over-the-air Sigfox downlink messages
- 2 x Analogue Inputs with auto range
- 3 x Digital Inputs

MECHANICAL FEATURES

Low-profile IP67 rugged housing	The IP67 rated housing is made of sturdy ABS/Polycarbonate plastic to survive bumps and knocks and many years in the sun and weather. It is low-profile and caters for a number of cable glands to allow for waterproof cable entry to the housing. The housing screws together for easy assembly, and has convenient mounting tabs.
Operating temperature	-20°C to +60°C For operation in extreme temperatures the device must be fitted with Lithium batteries
Dimensions (mm)	L 183 x W 145 x H 40

INTERFACES

SDI-12	This interface is commonly used in agricultural sensors and measurement devices for soil moisture probes, temperature, electrical conductivity (EC) of soils, water levels / pressures, other SDI-12 probes and sensors.
I ² C Interface	I ² C (inter-IC communications) is an interface commonly used in sensor modules. This allows the SensorData to talk to a wide range of sensors including: temperature, humidity, vibration, CO ₂ gas and many others. Speak to Digital Matter about sensor support.
Digital Inputs	3 x digital inputs, 0-48V 2 provide low power pulse counting
Analogue Inputs	2 x analogue inputs, 0-30V with auto-ranging Built-in battery voltage monitoring

SPECIFICATIONS

Network	Sigfox (LPWAN) Sigfox Zones RCZ1, RCZ2, RCZ4
External antenna	External ISM band antenna provides for maximum link budget with the flexibility to install a high-gain antenna if needed. Especially important for long range in rural agriculture applications.
Power (4-6V)	The SensorData is ultra-low power and is designed to run off a set of 4 x "C" cell Alkaline batteries for a full season. This includes powering the sensors and SDI-12 probes. These off-the-shelf batteries are low cost and readily available. It can also be powered by a USB 5V wall socket if permanently installed in a location with power.
Switched Sensor Power (6V or 12V)	Used to control the battery power to external sensors and peripherals. Load limited and short circuit protected. 12V capable boost is available to supply SDI-12 sensors, especially over long cable runs.
3.3V Switched Power	Used to control the 3.3V power to external sensors and peripherals. Load limited and short circuit protected.
GPS	The optional GPS module allows the SensorData to periodically update its location and time. Know the exact position of your sensors, and obtain an accurate time update.
Configuration	Via USB cable for firmware updates. Via over the air (OTA) downlinks for configuration
Test Button	Convenient to test installation and wiring.
Status LED	Visual feedback in the field for testing