newsteo instrumentation

Create networks of connected sensors



MEASURE S T O R E TRANSMIT

Any kind of sensor can be connected to the Newsteo Logger radio "universal" platform. As soon as the probe is plugged, the sensor is able to transmit its measurements through radio to a remote supervision center.

Interfaces and sensors to connect

- **Potentiometric**: for crackmeter, extensometers, pressure sensor, photoresistance, angular potentiometer...
- 4-20 mA or 0-10 Volt: for legacy displacement, pressure, liquid level, gas sensors...
- Impulse counters: flow meter, rain gauge, gas meter...
- Relay output: switch, contact...
- Gauge Wheatstone bridge interface: for structural or curve measurements
- Vibrating wire
- Other sensors: pyranometer, albedometer, air speed, pressure ...



LOCAL MONITORING

RF Monitor Software enables to remotely configure and monitor all Newsteo products from a local PC.



ONLINE MONITORING

WebMonitor application enables any allowed user to bring up on screen measures from Newsteo loggers from any device connected on the internet.

TECHNICAL SPECIFICATIONS

	Interface	Range of measure	Power supply for the sensor
LGS33	-50mV / +50 mV	02.5 Volt	NA
LGS37	02.5 Volt	-50mV / +50 mV02.5 Volt	NA
LGS31	Potentiometric 1 input	0 to 100%, impedance 1 Ohm to 65KOhm	2.7V /150mA max
LGP33	Potentiometric 1 input	0 to 100% Impedance: 1 KOhm 65 Kohm	2.7 Volt / 150 mA max
LGS3D	Wheatstone bridge,full-bridge	± 50 mV for a 2.7V excitation	NA
LGS34	4-20 mA	0 20 mA, impedance 62 Ohm	NA
LGS35	0-10 Volt	0 10 Volt	NA
LGS36	Relay	10 Hz	2.7V / 62mA max.
LGS39	Impulse	Up to 10 Hz	NA
LGN45	-5V / +5V 5 inputs	-5V / +5V	13.6V Conso. max.: 20mA (by sensor)
LGV41	Vibrating wire 4 inputs	0 à 3 Volt	3 Volt / 150mA

LGS Casing features

Weight: 250g Size: 96x64x34mm

Battery: 1AA Lithium Thionyl 3,6V

IP65 Aluminium Supplied fixation base 1/2 wavelenght antenna Radio transmission

On the ISM frequency: 868 \mbox{MHz}

Radio range : up to 1 kilometer

Battery autonomy

Up to 3 years (at 25°C with a measure frequency of 15 minutes)

Memory capacity

Up to 32 250 time stamped measurements. Equivalent to 7 months of data with a measure frequency of 15 minutes

Operating temperature

-40 ... +85°C

EVALUATION KIT

This kit gives you the opportunity to evaluate the Newsteo Loggers.

It is made of:

- A Newsteo LGS34 or LGS35 or LGS39, depending on your choice
- A cable to connect you sensor
- A RF-to-USB Key medium-range (1/4 wavelength antenna included)
- A CD-ROM containing the installation of the RF Monitor software (the application software of the Logger which enables the restoration of the recorded measures), USB drivers for the RF-to-USB key and the documentation.



