

# newsteo lgs & lgw

*Logger to convert any sensor into a wireless sensor*



## MEASURE STORE 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

The Newsteo LGS & LGW product range allows many interfaces to connect sensors:

- Potentiometric: for crackmeter, 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
- Other sensors: pyranometer, albedometer, air speed, pressure ...

## Functioning

As soon as the sensors are connected to the loggers, they can be installed in the field to monitor and send in real-time the measurement to the PC through radio. If the measure is not received by the PC, the Logger stores it in its embedded memory buffer and flushes it during the next communication window. The same PC can manage a network of 500 loggers. Any type of measurement can be displayed, processed, filtered and archived in a database.

The Newsteo Logger can also operate in Record mode by storing the data during the campaign. At the campaign's end, the monitor asks the logger to report all the measurements, by uploading them to the PC.



# TECHNICAL SPECIFICATIONS

	Interface	Range of measure	Power supply for the sensor
LGS33	0...2.5 Volt	0...2.5 Volt	NA
LGS37	-50mV / +50 mV	-50mV / +50 mV	NA
LGS31	Potentiometric	0 to 100%, impedance 1 Ohm to 10 MOhm	2.7V /150mA max
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
LGW31	Voltage	0 to 3 Volt	3 Volt / 150mA
LGW32	Voltage	0 to 1 Volt	10 Volt
LGW33	Voltage	0 to 2 Volt	12 Volt/ 100mA
LGW34	Voltage	0 to 10 Volt	12 Volt
LGW35 *	Voltage	0 to 10 Volt	15 Volt
LGW38	Voltage	0 to 5 Volt	10 Volt / 100mA

ATEX version  
Available

## 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 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

\* Available in mainpower supply version (rather than batterie)

## 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.

