



LGS31-001

potentiometer

Measurement range: 1KOhm to 65KOhm
Range: 100m to 1km
Certification : CE

Description

The LGS31 is a recorder with a potentiometric interface that can be used in two different modes:

Monitoring mode: measurements are sent in real time to the receiver, for real-time monitoring. If the measurement is not received by the receiver (key not plugged in, PC switched off, RF-Monitor not launched, communication problem, etc.), whether using an RF-toUSB key or a Gateway, the data logger stores the measurement in its buffer memory. As soon as communication is restored, the buffer measurements are automatically sent by the data logger to the receiver.

Record (monitoring) mode: measurements are stored in the data logger's memory. When the user gives the order by radio, the measurements are downloaded. This mode is used for measurement campaigns without instant transmission, with downloading via the RF Monitor software.

It is equipped with :

IP65 enclosure (Aluminium)

½ wave antenna

Power supply AA Lithium Thionyl battery

Specifications

LGS31	
Type	Potentiometric From $R_p = 1k\Omega$ to $10k\Omega$: linear transfer function From $R_p = 10k\Omega$ to $650k\Omega$: complex transfer function The transfer functions are integrated into RF Monitor and can be ported to another data reception tool
Number of channels	1
Measuring measurement	From $1k\Omega$ to $650k\Omega$ (for each channel)
Accuracy	Cumulative error 1LSB max like $\pm 3 \times 10^{-3}\%$ (using Newsteo transfer functions)
Resolution	1LSB (corresponds to the full scale of the sensor divided by 32768)
Responses time	0.15s / sensor Maximum measurement speed : 1s
Other sensor	Temperature sensor integrated on the electronic board

Operating temperature	$-40^{\circ}\text{C} \dots +85^{\circ}\text{C}$
IP level of data logger and connector	IP65 The tightness level of the product is only valid if the probe and antenna are correctly tightened (crushed joints)

Battery	AA Lithium Thionyl battery (included) with plug-in connector
Autonomy	Up to 3 years at 25°C with a measurement frequency of 10 minutes. Average value may vary slightly depending on use, given with the product operating in non-alert mode.

Measurement frequency	Can be set from 1 second to 4 hours
RF antenna connector	SMA connector
Antenna	$\frac{1}{2}$ wave antenna supplied
RF range	100m to 1km (depending on the antenna used on the receiving side)

Memory size	32 256 measurements with date and time
Time and date resolution	1s
Time deviation	+/- 2min/month at 25°C
Flash lifetime	Up to 100 000 cycles (100 years with one measurement per second)
ILS	Integrated ILS for various functions : <ul style="list-style-type: none">- Product wake-up when placed in hibernate mode (depp slepp)- Forced measurement outside the set measurement frequency