
# 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 | |
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| Type | Potentiometric<br>From Rp = 1kOhms to 10kOhms : linear transfer function<br>From Rp = 10kOhms to 650kOhms : complex transfer function<br>The transfer functions are integrated into RF Monitor and can be ported to another data reception tool |
| Number of channels | 1 |
| Measuring measurement | From 1kOhm to 650kOhm (for each channel) |
| Accuracy | Cumulative error 1LSB max like ±3 x 10 – 3% (using Newsteo transfer functions) |
| Resolution | 1LSB (corresponds to the full scale of the sensor divided by 32768) |
| Responses time | 0.15s / sensor<br>Maximum measurement speed : 1s |
| Other sensor | Temperature sensor integrated on the electronic board |

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| Operating temperature | -40°C... +85°C |
| IP level of data logger and connector | IP65<br>The tightness level of the product is only valid if the probe and antenna are correctly tightned (crushed joints) |

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| 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. |

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| Measurement frequency | Can be set from 1 second to 4 hours |
| RF antenna connector | SMA connector |
| Antenna | ½ wave antenna supplied |
| RF range | 100m to 1km (depending on the antenna used on the receiving side) |

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| 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 :<br>- Product wake-up when placed in hibernate mode (depp slepp)<br>- Forced measurement outside the set measurement frequency |