

Battery powered logger with integrated radar level sensor

LNRO6V4

The **LNRO6V4** is a water level sensor with built-in radar, particularly suitable for outdoor measurements (river monitoring, stormwater basins, etc.). Fully autonomous with long-life battery, data logger and built-in modem. The unit is easy to install and use, programming is carried out safely by radio link, without any physical action on the sensor.

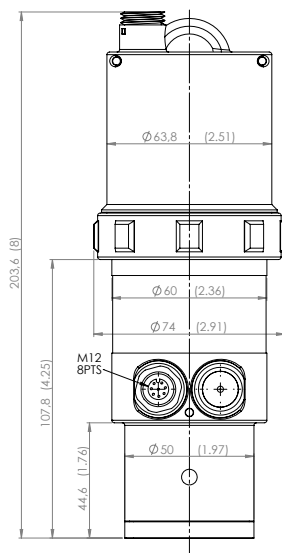


- **Wireless radio configuration (Wiji protocol)**
- **Long-life lithium battery**
- **Communication: local radio + optional: 2G / 4G (LTE-M / NB-IoT) / LoRaWAN**
- **Memory: 500,000 measures**
- **Inputs: External power supply (5 V - 30 V), 2 Contacts/100 Hz, Mod-bus**
- **Outputs: Power supply (internal battery or switch), Open Drain, Mod-bus**
- **IP68 waterproof rating (1 bar/30 days)**
- **Integrated conversion tables (height, flow, volume)**

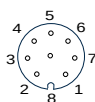
Applications

- Flood and meltwater monitoring
- Monitoring and management of storage tanks
- Ongoing diagnosis of sanitation networks
- Self-monitoring of stormwater overflows
- Water sampler enslaving

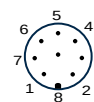
Features	LNRO6V4-82-LTE (868 MHz) - LNRO6V4-92-LTE (915 MHz)
Measuring distance	0.15 - 10 meters
Resolution	2,000 points over the measurement range, with a minimum of 1 mm (e.g.: ± 4 mm for a distance measurement of 6.0 m)
Measurement uncertainty	$\pm 0.2\%$ of distance measurement with a minimum of ± 2 mm
Communication	• HF radio (868 or 915 MHz) • 2G / LTE M / NB IoT (depending on option chosen) • LoRaWAN: Europe 863-870 MHz (SF12 for RX2) LoRaWAN Specification 1.0.2
Radio range	100 meters in open field (Wiji protocol)
Storage capacity	500,000 measures
Radio hub function	Yes
Radio / mobile antenna	• Internal or external radio • Internal or external mobile
Temperature range	-20°C - 70°C
Sensor material	PA12
Ingress protection	IP68 1 bar for 1 month (only if using Ijinus mounting kit; PN: HOT00053 or HOT00060)
Power	Lithium battery: 3.6 V - 34 Ah
Configuration	Wireless programming kit (PN: MOC00001) with AVELOUR software, cable and antenna
Technology	• 60 GHz radar imaging • eKo[®] algorithm • LAMY[®] filtering
ATEX zone 2 certification	II 3G Ex ic ec IIB T4 Gc Ambient temp: -20 °C - 60 °C
	
Certifications	



Wiring



Female



Male

Cable color	White	Brown	Green	Yellow	Grey	Pink	Blue	Red
8-pin connector	1	2	3	4	5	6	7	8
Name	Vin	GND	Vout	Modbus	Modbus	Input	Input	Output
Features	External power supply or battery (5V...30V)	Ground	Power supply 5...18V * (from internal battery) or Switch Vout = Vin	RS485 H	RS485 L	Digital 1 / Metering 1 100 Hz	Digital 2 / Metering 2 100 Hz	Contact Grounding
Type	Power supply input		Power supply output			Digital	Digital	Open drain (1A/30V)

* Maximum 1.8 W on V_{out} if the connected sensor is powered by the internal battery (voltage adjustable via software)

Options configurator			
LNR	Radar Level Logger		
06V4	Measurement range 0.15 - 6 m		
	Code	Frequency	
	8	868 Mhz Europe - China	
	9	915 Mhz USA - Canada - Australia	
	Code	Antenna	
	0	Internal radio	
	1	External radio	
	2	Internal radio / external mobile	
	3	External radio / external mobile	
	Code	Communication options	
	Empty	Local radio communication	
	LTE	Radio communication + 2G / LTE-M / NB-IoT	
	LP1	Radio communication + LoRaWAN	
LNR06V4-	8	2	LTE = LNR06V4-82-LTE