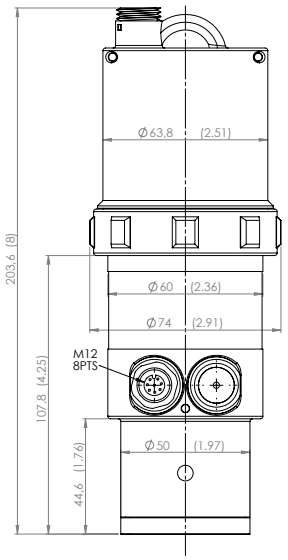
LNU - Ultrasonic data logger and level sensor

The **LNU06V4** is an acoustic imaging level sensor, particularly suited to level measurement in harsh environments. 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.

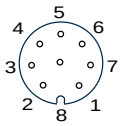
- **Wireless radio configuration (Wiji protocol)**
- **Long-life lithium battery**
- **Communication: local radio + optional: 2G / 4G (LTE-M / NB-IoT)**
- **Memory: 500,000 measures**
- **Inputs: External power supply (5 V - 30 V), 2 Contacts/100 Hz, Modbus**
- **Outputs: Power supply (internal battery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

Applications	
• Drinking water & wastewater	• Flood and meltwater monitoring
• Self-monitoring of stormwater overflows	• Voluntary inlet point monitoring
• Water sampler enslaving	• Process management
• Monitoring and management of storage tanks	• Metering

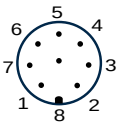
Features	LNU06V4-82-LTE (868 MHz) - LNU06V4-92-LTE (915 MHz)	
Measuring distance	0.15 - 6 meters	
Resolution	1,000 points over the measurement range, with a minimum of 1 mm (e.g.: ± 4 mm for a distance measurement of 3.0 m)	
Measurement uncertainty	± 0.2% of configured full scale (Laboratory tested)	
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: H0T00053 or H0T00060)	
Power	Lithium battery: 3.6 V - 34 Ah	
Configuration	Wireless programming kit (PN: M0C00001) with AVELOUR software, cable and antenna	
Technology	• Acoustic imaging • eKo ® algorithm	• LAMY ® filtering
ATEX zone 2 certification Ex	II 3G Ex ic ec IIB T4 Gc Ambient temp: -20 °C - 60 °C	
Certifications	CE	



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 (1 A / 30 V)

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

Options configurator				
LNU	Ultrasonic Level Logger (acoustic imaging)			
06V4	Measuring range 0.3 - 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

LNU06V4-	8	2	LTE	= **LNU06V4-82-LTE**