

LNR – Stand-alone logger and radar level sensor

The **LNR06V4-LE** 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 logger can be equipped with an interchangeable communication card allowing to switch from 4G to LoRa without changing the entire hardware. The unit is easy to install and use, programming is carried out safely by radio link, without any physical action on the sensor.


This model doesn't have any connector so no input/output functionality (alternative LNR06V4)



- **Wireless radio configuration (Wiji protocol)**
- **Long-life lithium battery**
- **Communication: local radio + optional communication card: 2G / 4G (LTE-M / NB-IoT) or LoRaWAN**
- **Memory: 500,000 measurements**
- **IP68 ingress protection (1 bar / 30 days)**
- **Built-in conversion tables (height, flow rate, volume)**

Applications


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| <ul style="list-style-type: none"> • Flood and meltwater monitoring • Monitoring and management of storage tanks • Ongoing diagnosis of sanitation networks | <ul style="list-style-type: none"> • Self-monitoring of stormwater overflows • Water sampler enslaving |
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Characteristics	LNR06V4	
Measuring distance	0.15 m - 10 meters	
Resolution	2,000 points over the measuring range with a minimum of 1 mm (example: ±4 mm for a distance measurement of 6.0 m)	
Measurement uncertainty	± 0.2% of distance measurement with a minimum of ± 2 mm	
Communication	<ul style="list-style-type: none"> • HF radio (869.2 MHz) • 2G / 4G (LTE M / NB IoT) Protocols: FTPS, HTTPS, COAP and MQTTS	<ul style="list-style-type: none"> • 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 measurements	
Radio concentrator function	Yes	
Radio / mobile antenna	<ul style="list-style-type: none"> • Internal or external radio 	<ul style="list-style-type: none"> • Internal or external mobile
Temperature range	-20°C - 70°C	
Sensor material	PA12	
Ingress protection	IP68: 1 bar for 1 month (only if using an Ijinus mounting kit; ref: H0T00053 or H0T00060)	
Power supply	Lithium battery: 3.6 V - 34 Ah	
Configuration	Wireless programming kit (PN: M0C00001) comprising AVELOUR software, cable and antenna	
Technology	<ul style="list-style-type: none"> • 60 GHz radar imaging • eKo[®] algorithm 	<ul style="list-style-type: none"> • LAMY[®] filtering
ATEX zone 2 certifications	II 3G Ex ic ec IIB T4 Gc Ambient temp: -20 °C - 60 °C	Certifications 





2G /4G Modem features		
Frequency Bands	LTE-FDD	Cat M1 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B26 / B27 / B28 / B66 / B85 Cat NB2 : B1 / B2 / B3 / B4 / B5 / B8 / B12 / B13 / B18 / B19 / B20 / B25 / B28 / B66 / B71 / B85
	GSM/EDGE	B5 / B19 / B3 / B2
RF Emission Power	GSM 900	+ 33 dBm
	GSM 1800	+ 30 dBm
	LTE B1 / B3 / B8 / B20	+ 23 dBm
B1 (2100) / B2 (1900) / B3 (1800) / B4 (1700) / B5 (850) / B8 (900) / B9 (1800) / B12 (700) / B13 (700) / B18 (800) / B19 (800) / B20 (800) / B25 (1900) / B26 (850) / B27 (850) / B28 (700) / B66 (1700) / B71 (600) / B85 (700)		

Options configurator				
LNR	Radar Level Logger			
06V4-LE	Measuring range 0.15 - 10 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

