



IJINUS

SENSOR / CONCENTRATOR / DATA LOGGER

HF/GSM/GPRS/MODBUS



- Level measuring range from 3 to 10m
- Integrated conversion tables(Flow rate, volume)
- Wireless setting with Rfid technology
- Memory : up to 500 000 measures
- Sealing : IP68
- Replaceable lithium battery powered
- Input : Counter, status, events, pulse
- Output : HF radio, GSM, GPRS, MODBUS, 4-20mA, Switch

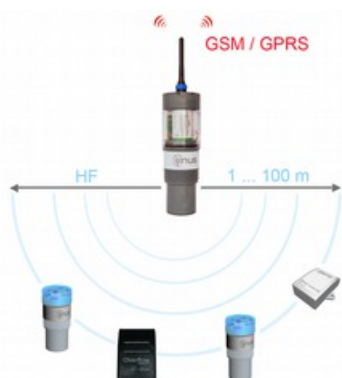
Recognized as an autonomous measuring systems expert, IJINUS presents a range of **wireless ultrasonic level sensors** called **LNU** and a new range of **level sensors called CNU for process applications**.

It represents all the Ijinus know-how in terms of performance of measure using the acoustic imaging technology, miniaturization, ease of use and data transmission.

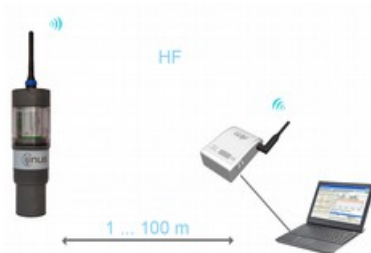
GSM/GPRS communication

LNU sensors measure, record and collect data up to 15 Ijinus devices in its wireless range. Data are then sent by GSM/GPRS to the supervision server.

Some models fitted with connector allowed you to directly save data by Modbus, 4-20mA, pulse and digital.



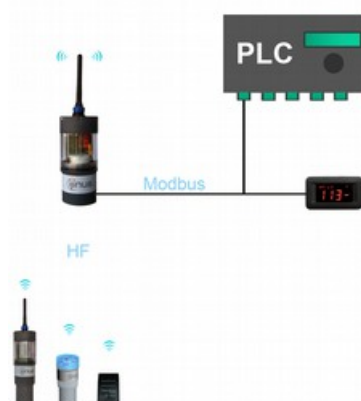
HF communication



The mobile kit is a radio receiver and transmitter, it connects to a computer via USB. It allows secured radio connections (RFID) to various sensors and other IJINUS devices, to configure and to retrieve data.

HF/Modbus communication

The master LNU sensor collects data that can be retransmitted by Modbus to a display or a PLC.





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4-20mA communication

CNU sensors can be interfaced to analog 4-20mA directly with PLC or displays for process applications.

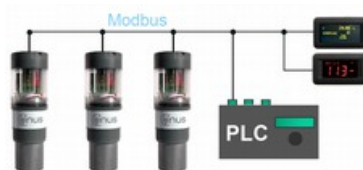
You can program CNU type sensors with our wireless kit.



Modbus communication

CNU sensors can also be directly interfaced to digital Modbus RTU with PLC and local displays for process applications.

You can program CNU type sensors with our wireless kit.



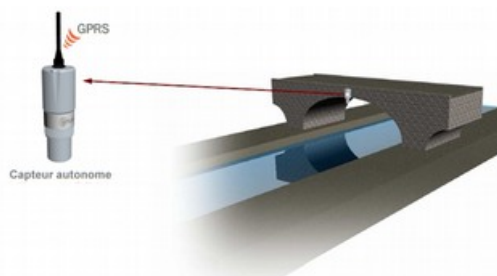
« custom » communication

The design of **LNU** sensors allows us to make them compatible with your specific radio frequency network. To do this, we simply integrate into the LNU a communicative daughter card that has been developed according to your specifications.



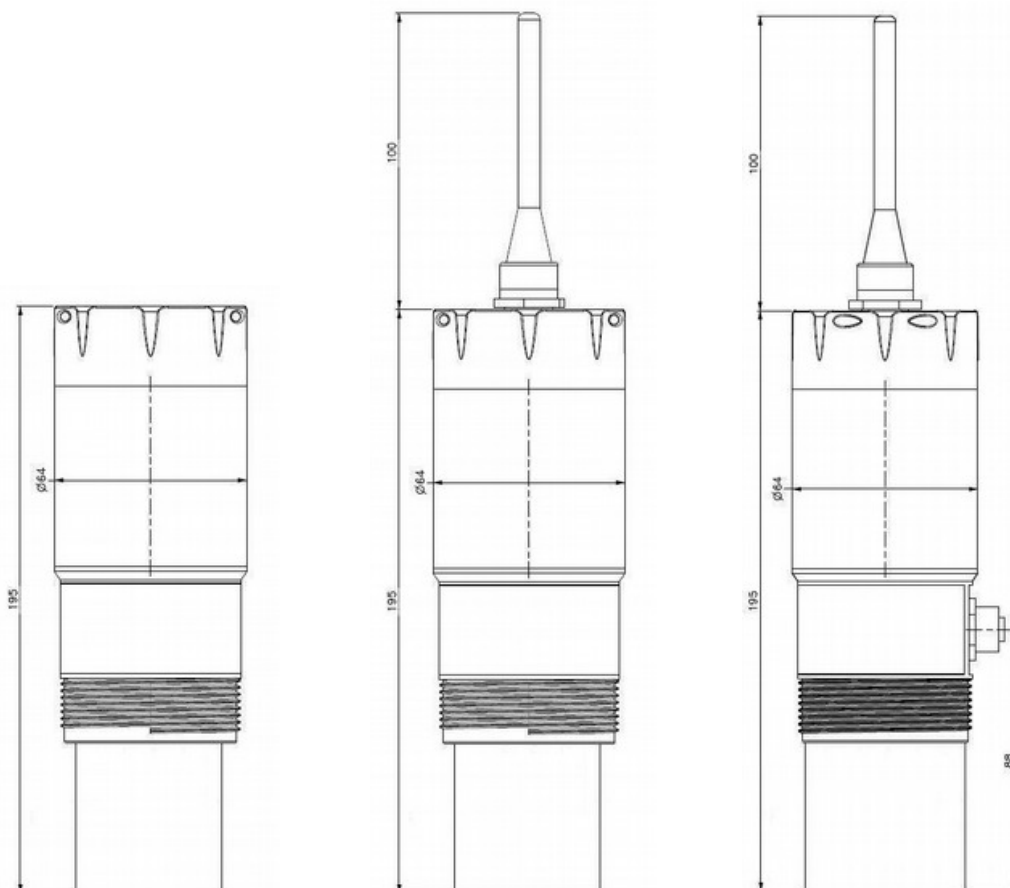
APPLICATIONS:

Water & Wastewater - CSO monitoring - Remote tank monitoring
Flood Warning systems - Bin management



**IJINUS****SENSOR / CONCENTRATOR / DATA LOGGER HF/GSM/GPRS/MODBUS****LNU**

Features	LNU 300 X- CONTAINER	LNU 300 X	LNU 600 X	LNU1000 X
Measuring range	0,4 ... 3,0m : Angle 40°	0,2 ... 3,0m	0,3 ... 6,0m	0,4 ... 10,0m
Accuracy	1000 points 2mm : measure 0,4...1,5m 4mm : measure 0,4...3,0m	1000 points 2mm : measure 0,2...1,5m 4mm : measure 0,2...3,0m	1000 points 4mm : measure 0,3...3,0m 7mm : measure 0,3...6,0m	1000 points 7mm : measure 0,4... 6,0m 10mm : measure 0,4... 8,0m 20mm : measure 0,4...10,0m
Temperature compensation	Yes : internal temp. probe	Yes : internal temp. probe Option : external temp. probe for high gradients	Yes : internal temp. probe Option : external temp. probe for high gradients	Yes : internal temp. probe Option : external temp. probe for high gradients
Data logger	500.000 Measures	500.000 Measures	500.000 Measures	500.000 Measures
Data concentrator	Yes	Yes	Yes	Yes
HF antenna	Internal Option : external antenna	Internal Option : external antenna	Internal Option : external antenna	Internal Option : external antenna
Options : Input	No	Contact input 1Hz / Dig.T°C / Contact NO/NC / Switch	Contact input 1Hz / Dig.T°C / Contact NO/NC / Switch	TOR 1Hz / T°C Num Contact NO/NF
Options : Output	GSM / GPRS 4-20mA	GSM / GPRS Modbus RS485	GSM / GPRS Modbus RS485	GSM / GPRS Modbus RS485
Option Antenne GSM	Yes	Yes	Yes	Yes
Operating temperature	-20 ...60°C	-40 ...85°C	-40 ...85°C	-40 ...85°C
Sensor Housing	ABS 20%FV	ABS 20%FV	ABS 20%FV	ABS 20%FV
Lid	ABS	PC Transparent	PC Transparent	PC Transparent
Sealing	IP68	IP68	IP68	IP68
Energy	Bat : 3,6V 17Ah ou 34Ah	Bat : 3,6V 17Ah ou 34Ah	Bat : 3,6V 17Ah ou 34Ah	Bat : 3,6V 17Ah ou 34Ah
Autonomy	Up to 5 years	Up to 5 years	Up to 5 years	Up to 5 years
Programing software	AVELOUR	AVELOUR	AVELOUR	AVELOUR
Technology	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter
Option :Atex pack F0A00035	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C... +60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C
Certifications : CE / FCC / IC	   : SE6A001 : 10983A-A001	   : SE6A001 : 10983A-A001	   : SE6A001 : 10983A-A001	   : SE6A001 : 10983A-A001



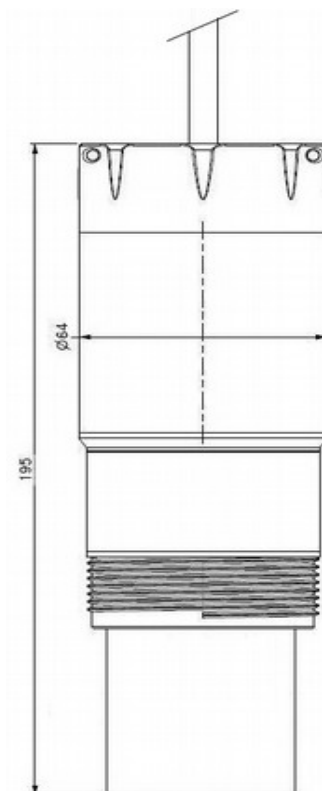


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CNU

Features	CNU0300	CNU0600	CNU1000	CNU 300 X - CONTAINER
Measuring range	0,2 ... 3,0m	0,3 ... 6,0m	0,4 ... 10,0m	0,4 ... 3,0m : Angle 40°
Accuracy	1000 points 2mm : mesure 0,2...1,5m 4mm : mesure 0,2...3,0m	1000 points 4mm : mesure 0,3...3,0m 7mm : mesure 0,3...6,0m	1000 points 7mm : mesure 0,4... 6,0m 10mm : mesure 0,4... 8,0m 20mm : mesure 0,4...10,0m	1000 points 2mm : mesure 0,4...1,5m 4mm : mesure 0,4...3,0m
Temperature compensation	Yes	Yes	Yes	Yes
HF antenna	Interne Option : Antenne externe	Yes : internal temp. probe Option : external temp. probe	Yes : internal temp. probe Option : external temp. probe	Yes : internal temp. probe Option : external temp. probe
Input	Contact input 1Hz	Contact input 1Hz	Contact input 1Hz	Contact input 1Hz
Output	Modbus RS485 4-20 mA, switch, Open Drain	Modbus RS485 4-20 mA, switch, Open Drain	Modbus RS485 4-20 mA, switch, Open Drain	Modbus RS485 4-20 mA, switch, Open Drain
Operating temperature	-40 ... 85°C	-40 ... 85°C	-40 ... 85°C	-40 ... 85°C
Sensor Housing	ABS 20%FV	ABS 20%FV	ABS 20%FV	ABS 20%FV
Lid	ABS 20%FV	ABS 20%FV	ABS 20%FV	ABS 20%FV
Sealing	IP68	IP68	IP68	IP68
Energy	8 ... 30Vdc	8 ... 30Vdc	8 ... 30Vdc	8 ... 30Vdc
Power consumption	Env. 850 mW	Env. 850 mW	Env. 850 mW	Env. 850 mW
Programing software	AVELOUR	AVELOUR	AVELOUR	AVELOUR
Technology	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter	Acoustic imaging Algorithm eKo® LAMY® filter
Option :Atex pack F0A00035	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C	 II 3G Ex ic nA IIB T4 Gc Tamb : -20°C...+60°C
Certification				





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WALL MOUNT KITS



Specifications :



WALL MOUNT KIT WITH PLATE AND VISSERIE

P/N	M0A00001
Material	INOX
Dimensions	250 x 60

Wall mount for level sensors LNU 1000



KIT INCLUDING PLATE, BRAKET Ø60 AND VISSERIE

P/N	M0A00003	
Material	INOX	
KIT PLATINE DOUBLE AVEC VISSERIE ET CLIP SUPPORT Ø60		
P/N	M0A00009	
Material	INOX	

Wall mount for level sensors Ijinius LNU 300 - LNU 600



KIT INCLUDING PLATE, BRAKET Ø50 AND VISSERIE

P/N	M0A00002	
Material	INOX	
KIT PLATINE DOUBLE AVEC VISSERIE ET CLIP SUPPORT Ø50		
P/N	M0A00006	
Material	INOX	



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Code	Family										
LNU	Level logger by acoustic imaging										
	<table><tr><th>Code</th><th>Measuring range</th></tr><tr><td>0300</td><td>3m (10 ft)</td></tr><tr><td>0600</td><td>6m (20 ft)</td></tr><tr><td>1000</td><td>10m (33 ft)</td></tr></table>	Code	Measuring range	0300	3m (10 ft)	0600	6m (20 ft)	1000	10m (33 ft)		
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	<table><tr><th>Code</th><th>Input / Output</th></tr><tr><td>0</td><td>No connector</td></tr><tr><td>2</td><td>Connector 5B : 2 Contact input 1Hz + 1 Digital T°C input</td></tr><tr><td>7</td><td>Connector 8G : 2 Contact input 1Hz + 1 Digital T°C input + 1 Switch + 1 open drain contact</td></tr></table>	Code	Input / Output	0	No connector	2	Connector 5B : 2 Contact input 1Hz + 1 Digital T°C input	7	Connector 8G : 2 Contact input 1Hz + 1 Digital T°C input + 1 Switch + 1 open drain contact		
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GSM	Communication GSM/GPRS										

LNU	0600	0	8	2	X	GSM
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= LNU0600-0-82X-GSM

Connector 5B		1	2	3	4	5			
Input / Output		Vout	GND	Input	Input	Input			
Signal		5Vdc		T°C	Contact input	Contact input			
Type		Power out		Digital (1Wire)					

Connector 8G		1	2	3	4	5	6	7	8
Input / Output		Vout	GND	Input	Input	Input	V in switch	V out switch	Output
Signal		5Vdc		T°C	Contact input	Contact input	30Vdc max	30Vdc max	Contact
Type		Power out		Digital (1Wire)			Power in	Power out	Open drain

Connection cable to control an ISCO SIGMA 900 SD sampler with a level sensor LNU equipped with a connector 8G	
D0I00036	OVERMOULD PUR CABLE 5M Hirschmann plug 7 PTS (to be connected to an Isco-SIGMA Sampler)



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Code	Family								
CNU	Ultrasonic level sensor for process applications								
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CNU06000800L = CNU0600-0-80L

Couleur	WH	BN	GN	YE	GY	PK	BU	RD
Connector 8F	1	2	3	4	5	6	7	8
Input / Output	V in	GND	RS485	RS485	output	output	output	input
Signal	8...30Vdc		Modbus High	Modbus Low	4-20mA	Contact	Contact	TOR
Type	Power in		Master / Slave	Master / Slave	Analog	Open drain	Open drain	

Antenna				
HF antenna	GSM antenna	Zone	Size	Type
	B0E00004	EU/US	10 cm	↓
	B0E00013	EU/US	3M	↓
B0E00020	B0E00014	EU	1M	↓
B0E00021	B0E00015	EU	3M	↓
B0E00022	B0E00016	EU	5M	↓
B0E00023	B0E00017	US	1M	↓
B0E00024	B0E00018	US	3M	↓
B0E00025	B0E00019	US	5M	↓