



iJINUS
CLAIRE GROUP

Telemetry Solutions Sensor - Data Logger - Web Services



The solution to manage livestock feed in silos fast, easy to install and reliable

- Optimise orders
- Increased earning
- Eliminate risk of accidents
- Stocks traceability

Locally monitor your silos
data with a display



iJINUS
CLAIRE GROUP

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29300 MELLAC, France

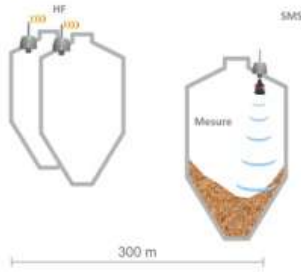
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www.ijinus.com / Email : info@ijinus.com

iJinus, a compagny from the pole



► OPERATION PRINCIPAL

Functioning



Installation / Functioning

The sensors are battery powered. The master sensor concentrate all data from others silos and send them to the web service : ijitrack.com

Solution from 1 to 8 silos

One sensor per silo with GSM / GPRS communication

Solution from 9 to 32 silos

One sensor per silo and one access point GSM / GPRS DC powered

Web services



ijitrack.com

Filling measures,
Temperature, battery levels, level trends
Data hosting,
history and alarms

Mobile App WIJI

Freely download our App from Apple Store & Google Play



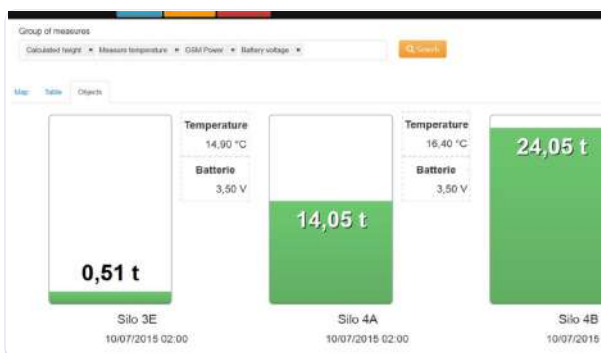
Option : local display



Local display

An access point retrieve datas from sensors intalled in the silos. It is connected by modbus RS485 on the color LCD display

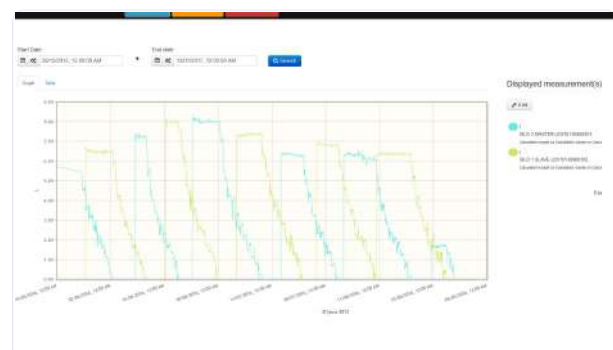
► IJITRACK.COM



More than just a data hosting service

- Simple and intuitive interface
- Accessible from anywhere
- Ijitrack lets you set alarms on levels, the air temperature in the sensor area, battery voltage
- Its alarms generate informations by E.mail, SMS

Object	Container	Content(s)	Date	Calculated weight
SILO 1 SLAVE IJC0101-00000102		Al	12:54 PM	7,90 t
SILO 2 MASTER IJC0101-00000101		Al	12:55 PM	3,16 t
SILO 3 SLAVE IJC0101-00000103		Al	12:54 PM	6,60 t
SILO 4 SLAVE IJC0101-00000105		Al	12:54 PM	4,64 t



► PRESENTATION OF THE SOLUTION

QUICK AND EASY INSTALLATION



WEB ACCESS (PC, Tablet, Smart Phone)



CONFIGURATION, REMOTE SUPPORT AND COMMISSIONING



Gains on time :

- Easy control, no unnecessary travels
- Stock inventory in real time, information are available online, accessible from anywhere, several times / day on **V2.ljitrack.com**
- No need to empty the silos during installation
- A system without particular maintenance
- Auto diagnosis of digital measurement.

Financial Gains :

- Saves time to find out the real-time inventory (2 to 4 silos) 30 min / week
- Optimizes control and storage time, avoid overstocking of certain foods used for a short time
- No more surprise when loading, prevents silos overload and returns
- No More out of stock, which necessarily entails a costly troubleshooting
- Enjoy the maximum truckload discount

Benefits :

- Eliminates the risk of falls (no need to get on the silos to evaluate stocks)
- Detect abnormal loading (silo error)
- Indicates the temperature inside the silo (temperature of the internal air)
- Proof of delivery
- Anticipate the empty silos to ensure their cleanliness and avoids sources of mold growth
- No mixing when using a supplemented food
- Knowledge of the actual available capacity avoids the overhead silo

► QUICK AND EASY INSTALLATION

Necessary informations for the installation

- Exact silos dimensions with sketch (provided by the customer or the fitter)
- Type of food: flour, granulated, crumb ...
- Type of silo (smooth or corrugated sides - right or departed cone)
- Number of silos (1 master sensor for a maximum of 8 silos in the standalone solution)
- Maximum distance radio communication between silos

Materials required :



Level ultrasonic sensor 0.4...10m

- LNU1000-0-80X-C1-GSM / **Master**
- LNU1000-0-80X-C1 / **Slave**

Mounting materials :

- **Adaptator** : FOA00014
- **Mounting plate** : GOA00010

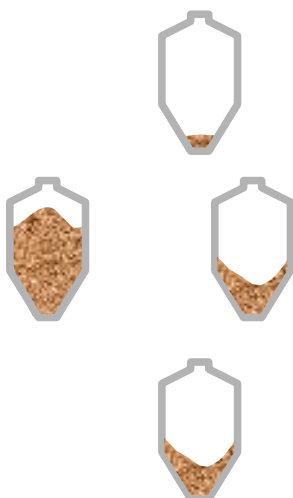


Data hosting, interface, reports , alarms

The choice between two interfaces :

- <http://www.ijitrack.com>
- Wiji mobile App, available for Android & Iphone

Option : Local LCD display



Concentrator HF/Modbus

- AP1-MOD-90X



Modbus RS485 LCD display

- F0D00006



Ultrasonic level sensor LNU1000 - HF/GSM/GPRS (Modem 3G)

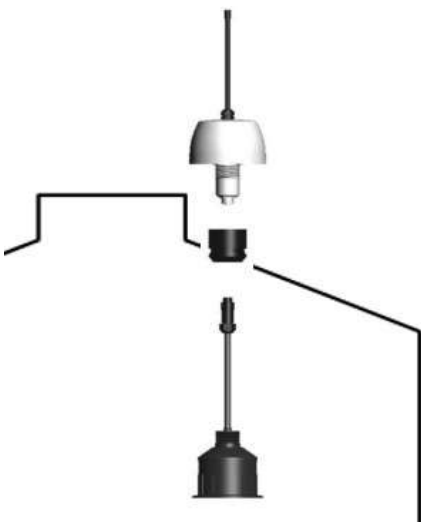


- Smart and communicating solutions for silos
- Quick and easy installation
- Wireless (Rfid or GPRS) configuration
- Weatherproof : IP65 sealing
- Battery powered solution, long-lasting life
- One master device for 7 slaves
(beyond, one concentrator supplied in energy is required)
- Level sensor measuring range : 0,4...10m

IJINUS show his new range of Plug & Play sensors for breeding monitoring silos. This innovation materialize more than 10 years experience in breeding silos solutions using ultrasonic technology. Those sensors are easy to install and use. With our web monitoring platform and our mobile App available for Android and IOS, you can monitor and manage your supply chain clearly.

Installation

- 1 – Drill silo with a hole saw
- 2 – Fix adapter
- 3 – Fix sensor and connect the probe



GSM/GPRS configuration

With a magnet, switch on the sensor to start remote configuration (available with GPRS)

Service provision includes one month of observation to integrate specificities of silos (structure, position...)

After several filling cycles measurement is validated by our services.

Monitoring and alerts

A display could be installed on site and you can check and retrieve data with our customized website: Ijitrack.com

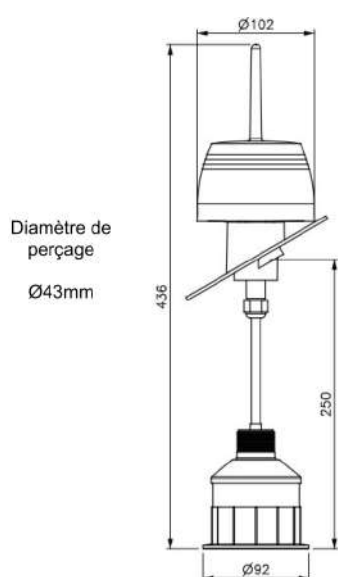


Choose threshold alert and the way to receive it: SMS, Email ...

The Wiji App is also available on your mobile phone and let you check from at anytime, everywhere your data

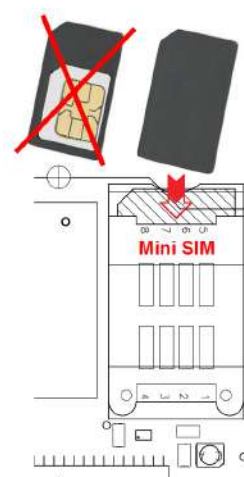
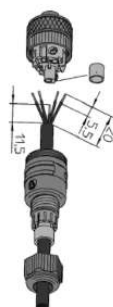
Ultrasonic level sensor LNU1000 - HF/GSM/GPRS (Modem 3G)

	Sensor with integrated communication HF and GSM/GPRS	Sensor with integrated communication HF
Part numbers	LNU1000-0-80X-C1-GSM (868 MHz) LNU1000-0-90X-C1-GSM (915 MHz)	LNU1000-0-80X-C1 (868 MHz) LNU1000-0-90X-C1 (915 MHz)
Measuring range	0,4 ... 10m	0,4 ... 10m
Resolution	1 cm	1 cm
Accuracy	± 5% solid / ± 1% on liquid	± 5% solid / ± 1% on liquid
Communication	Radio HF (868 or 915 MHz) GSM / GPRS	Radio HF (868 or 915 MHz)
Radio distance	500m	500m
Temperature compensation	Yes : yes internal temperature probe (°C)	Yes : yes internal temperature probe (°C)
Logger memory capacity	1.000 Measures	1.000 Measures
Data access point	Yes up to 7 slave sensors (for the battery powered solution)	No
Antenna HF / GSM	¼ longueur d'onde / Patch quad band	¼ longueur d'onde / Patch quad band
Temperature range	-40 ...85°C	-40 ...85°C
Configuration	Software AVELOUR or remotely using GPRS	Software AVELOUR
Technology	Acoustic Imaging Algorithm eKo [®] Filtering LAMY [®]	Acoustic Imaging Algorithm eKo [®] Filtering LAMY [®]
Security	Antistatic kit for metal silo	Antistatic kit for metal silo
Certification	CE	CE



Wiring

- 1 : US+ / Red
- 2 : GND / Black
- 3 : Shield
- 4 : T°C/ White
- 5 : NC (can be removed)



► INFORMATION SHEET

User information

Company:

Contact :

Tel :

Fax :

Mobile :

Email :

Installation site

Site name :

Address :

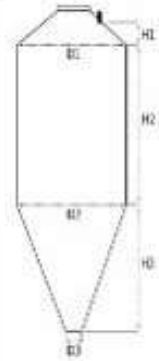
Contact on site:

Fitter

Company :

Installation date:

SILO ID	H1	H2	H3	D1	D2	D3	HT total	Corrugated sides
	cm							
A								<input type="checkbox"/>
B								<input type="checkbox"/>
C								<input type="checkbox"/>
D								<input type="checkbox"/>
E								<input type="checkbox"/>
F								<input type="checkbox"/>
G								<input type="checkbox"/>



SILO NAME	Modele Silo	Sensor serial number

SILO NAME	Modele Silo	Sensor serial number

Comments

► INSTALLATION GUIDELINES

Equipment

- Communicating generator mounted with its ultrasonic probe
- Mounting plate and ring
- hole saw 108mm
- 3x fixation screws for the mounting plate
- Seal and gun
- Protective gloves
- Cover plate
- Plastic clamp



Drill into the silo with the hole saw 108mm and take off the round piece

Be careful not to drop the operculum !



Place the mounting plate

Mark the placement of the 3 screws and make pre-drilled holes to prepare the drilling



► INSTALLATION GUIDELINES

Sealed around the hole

Put some seal around the hole
Using the gun

Put back the mounting plate on the hole and screw



Insert the wired probe

The ultrasonic probe has to be passed into the mounting hole and held with the plastic clamp

The probe is ready

You may put more seal around the plate

The installation is now done



Access the data on the web platform Ijitrack :

Data are available on the site www.ijitrack.com

Ask your reseller your connection ID

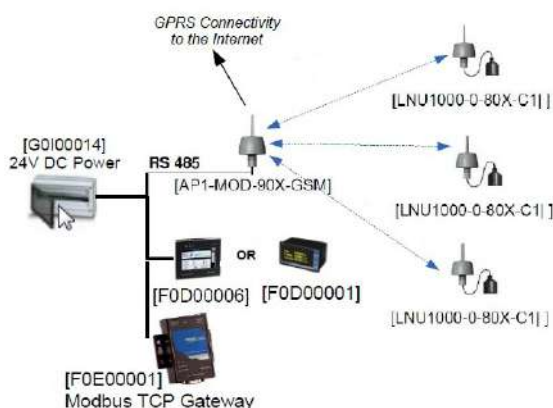
► OPTION : ON-SITE TOUCH PANEL



Touch panel - MODBUS

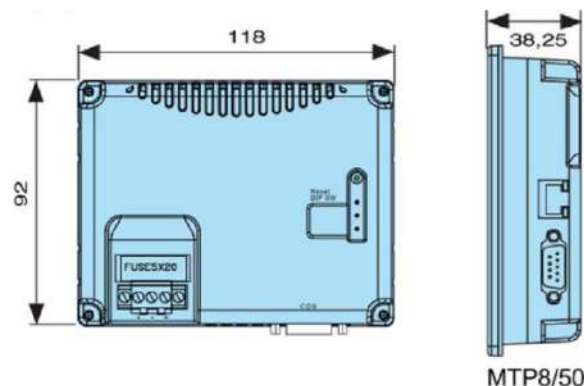
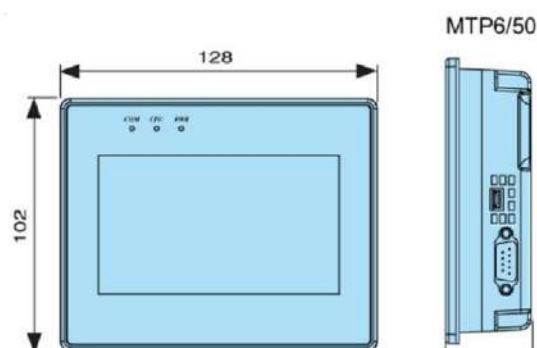
- 4.3" TFT-LCD compact resistive touch panels
- 65536 colors, LED backlight
- Resolution : 480 x 272 pixels
- 32 silos peuvent être affichés (4, 8, 16 ou 32 silos par pages)

OPERATION SKETCH



Features	Part number : F0D00006
Power supply	19,2...28,8VDC
Current consumption	7,2W max
Protection rating	IP65, dust and droplet
Température d'utilisation	0°C..+45°C
Storage temperature	-20..+60°C
Dimensions (l x h x w)	128 x 102 x 38 mm
Mounting::	2 screw clamps (supplied)
Weight	300g

Dimensions



Associated part numbers :

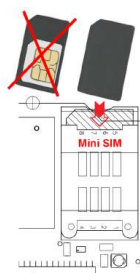
AP1-MOD-80X
LNU1000-0-80X-C1
G0I00014
F0D00007

ACCESS POINT HF AUTONOMOUS - MODBUS
LEVEL SENSOR 0.4...10m Angle 12° BATTERY POWERED ESTERNA PROBE – SILO - SLAVE
EQUIPED CASE 24V/60W POWER SUPPLY - SURGE PROTECTION 10kA/230V - 1 ROW
CASE FOR MODBUS TOUCH PANEL 32 CHANNELS COLOR

► WIRELESS ACCESS POINT : HF/GSM/GPRS

After 8 silos, you need a power supply access point

	HF Concentrator with Modbus and GSM/GPRS Connectivity	HF Concentrator with Modbus Connectivity
Part Numbers	AP1-MOD-80X-GSM (868 MHz) AP1-MOD-90X-GSM (915 MHz)	AP1-MOD-80X (868 MHz) AP1-MOD-90X (915 MHz)
Communication	Radio HF (Wiji Protocol) GSM / GPRS	Radio HF (Wiji Protocol)
Radio	500 m	
Modbus	RS485 half duplex	
Power supply	8...30V DC / 2W max. - Internal backup battery	8...30V DC / 2W max. - Internal backup battery
Connector	M12 5PTS	
HF antenna	1/4 Wave Length	
GSM antenna	Internal Quad-Band Patch	
Operating temperature	-40 ...85°C	
Housing	ABS 20% Glass fiber	
Sealing	IP65 with aerateur	
Configuration	AVELOUR software or remotely by GPRS	AVELOUR software
Certification	CE	



Wiring

- 1 : V+
- 2 : GND
- 3 : RS485 High
- 4 : RS485 Low
- 5 : Shield



Plug ref. : C0300003



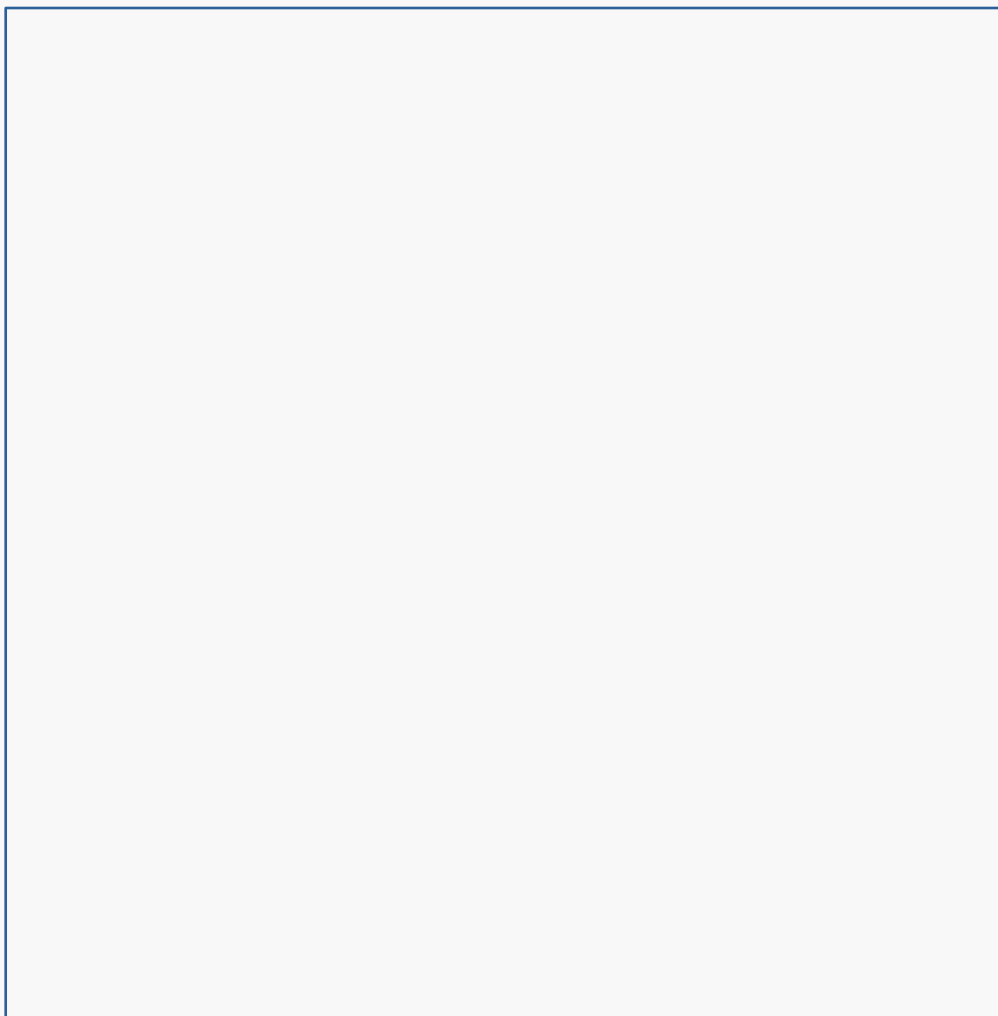
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Sensor - Data Logger - Web Services

► CONTACTS

For all information, please contact us or your local distributor



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