

MAGLINK LX

“Link the world”

Main features

- Web access and WI-FI connection
- IFSF compliance
- Colour resistive touch-screen TFT 7" display
- Manages up to 32 tanks
- Event recording up to 32 Gb with removable micro-SD card
- Safe and easy programming via web based interface
- Full color graphical display showing:
 - product level in mm
 - real volume and compensated at 15 °C in litres
 - interface measure in mm (water detection)
 - product mean temperature
 - volume of empty portion of tank in litres (Ullage)
 - Fuel Quality sensor (Density, Viscosity, Dielectric)
 - alarm signals, unit of measure
- Tank strapping table stored in NV RAM up to 500 points
- Integrated communication protocols including: Tokheim, Gilbarco, Dresser Wayne, Retalix, Orpak, DOMS
- Leak detection, automatic reconciliation, deliveries, trends, historical events / alarms recording
- Inches/Gallons option

Technical characteristics

- Microprocessor:
 - CPU: Cortex ARM A8 @ 600Mhz
 - Memory: 256 MB DDR2
 - Storage: 512 MB NAND Flash
- Power Supply 230 Vac - Real Time Clock
- GSM/GPRS, Radio wireless
- No 04 low power programmable relays
- No 06 digital /analog inputs
- RS485 - RS232
- Ethernet port
- USB device
- Can-bus port
- Active or passive integrated Intrinsically safe barriers
- Synthetic resin enclosure IP40 protection



Up to 256 Mb RAM

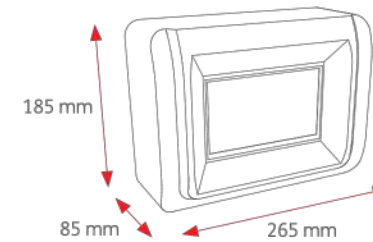


High quality color TFT 7" display
Touchscreen



Ethernet and legacy systems supported

TOTAL CONNECTION



MAGLINK LX

01	02	03	04	05	06	07	08
Tank List							
Gasoline		Prd.Vol (l) 45792	TANK - 03		Prd.Vol (l) 45545		
		Ullage (l) 4208			Ullage (l) 4455		
		Temp.(CA°) 18.7			Temp.(CA°) 15.0		
		Water (l) 5940			Water (l) 0		
		WATER + HIGH			Status OK		
Diesel		Prd.Vol (l) 5099	TANK - 04		Prd.Vol (l) 11111		
		Ullage (l) 4901			Ullage (l) 38889		
		Temp.(CA°) 15.0			Temp.(CA°) 15.0		
		Water (l) 0			Water (l) 0		
		Status OK			LOW		
		50	03		08/05/2014 13:27:45		P 02/08

01	02	03	04	05	06	07	08	
Situation								
01	Gasoline	WATER + HIGH	91,6 %					
02	Diesel	Status OK	51,0 %					
03	LPG	Status OK	91,1 %					
04	Gasoline	Status OK	82,1 %					
05	Gasoline	Status OK	15,3 %					
06	Diesel	Status OK	5,3 %					
07	Gasoline	Status OK	90,1 %					
		200	06		08/05/2014 13:26:49		P 03/08	



Certifications

Complete system certification (probe+console+barrier)

CEC 12 ATEX 028 II 1 G Ex ia IIB T4 Ga
 II 1D Ex t IIIC T135 °C Da IP66/68

Intrinsically safe barrier ATEX certification

BRA-SIP / BRA-2SIP:

CEC 10 ATEX 025 Rev. 3 II (1) G [Exia] IIB
FISCO Power Supply U_m = 250 V [Exia] IIB

BRA-SI:

CEC 10 ATEX 025 Rev. 3 II (1) G [Exia] IIB
FISCO Power Supply U_m = 400 V [Exia] IIB

Magnetostrictive liquid level gauges

with rigid stainless steel shaft up to 5,5 meters suitable for gasoline, gasoil, LPG, adblue, solvents, with multipoint technology.

Different versions for different applications

- radio wireless, battery powered
- wired with RS485 communication
- wired RS485 LOG: tank measure recording if power and communication are lost.

ATEX, CE, IP protection, OIML compliance

- intrinsically safe or explosion proof versions
- submersible IP68 protection certified
- metrological certification:
 - OIML R85 for fixed tanks.

Magnetostrictive level probe

Operating principle

The operation of **Magnetostrictive Level Probe** is based on the principle denominated **Wiedemann effect** and allows a continuous and highly accurate reading of the level of liquids inside a tank.

The **level transmitter XMT** consists of an electronic circuit with microprocessor located in the head and of a stainless steel rod housing a wave guide located inside the tank.

A high frequency electric impulse is generated by the electronic device.

In the exact point of intersection with the magnetic field generated by the permanent magnet housed in the float, a mechanical impulse caused by the magnetostrictive torsional deformation is generated.

The mechanical impulse travels at the speed of sound in the wave guide up to the detector located in the measuring housing.

By measuring of the time elapsed between the sending of the initial signal and its return the exact position of the floats along the rod is defined with 0,01 mm. resolution.

Main features

- Supports tele-diagnostic/maintenance functions.
- Internal sensor replacement without removing rod from the tank. Remote configuration of operation parameters.
- Connection to the tank: fixed or adjustable thread flanged/inside riser.
- Stainless Steel AISI 304/316 shaft
- Measuring range from 500 mm. up to 5.500 mm
- Calculation of data relating to:
 - Product level in 0,01 mm
 - Interface level in 0,01 of mm. (water presence detection)
 - Product mean temperature up to max. 5 integrated digital sensors
- Standard measuring accuracy: +/- 0,5 mm
- Standard resolution: +/- 0,01 mm
- Temperature accuracy range -20 +70 °C: +/- 0,2 °C
- Temperature resolution: ± 0,0625 °C

I.S. wireless probes XMT-SI-RF

New generation of magnetostrictive wireless level gauge with the ultimate low frequency wireless technology

Advantages

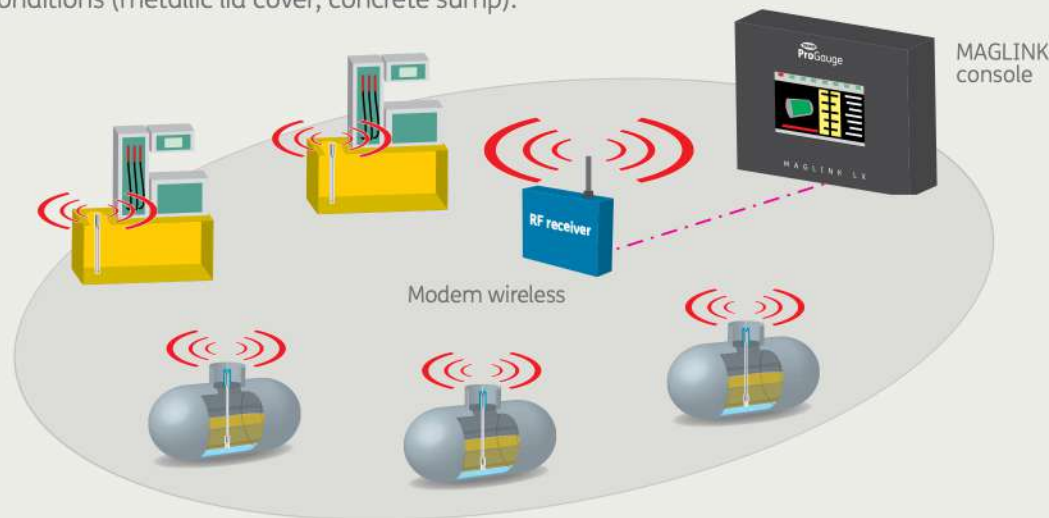
- Avoid expensive costs for digging, wiring and cables.
- Low power consumption with save energy management.
- Long life lithium battery up to 5 years.

Stainless steel IP68 compact version:

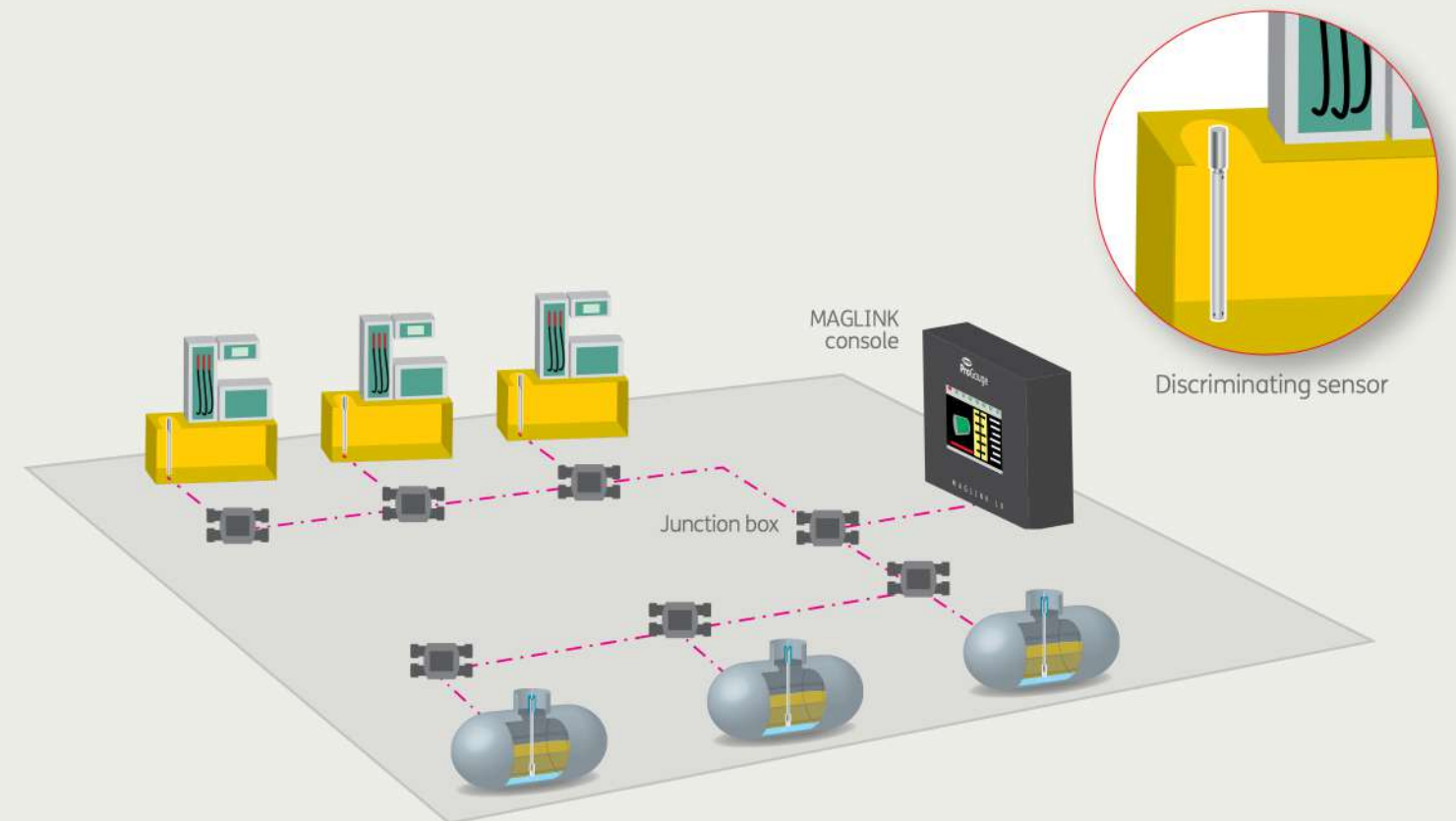
- Battery and antenna embedded inside the probe.
- Suitable for underground and above ground tanks.
- Reliable and guaranteed data transmission in harsh conditions (metallic lid cover, concrete sump).

Features

- Wireless transmission to the RF receiver up to 2 Km. line of sight.
- RF repeater for difficult environmental application.
- Wake up on radio function.
- Power up 500 mW adjustable.
- Signal measurement and display.



“Multipoint” wiring for wired probes



Magnetostrictive probes

I.S. probes XMT-SI-485/RF Series

Intrinsically safe version.

- Stainless Steel Enclosure Ø 50 mm IP68 (submersible up to 1,2 m per 24 hours)
- In 2" riser installation
- 7/8" circular connector with standard cable length 2 m. Ø 9 mm, hydrocarbon resistant in according ENI specification
- Power supply: 12 VDC
- RS485 serial port / antenna
- I.S. circuits to wire to an intrinsically safe barrier active (BRA-SI) or passive (BRA-SIP) (only for RS485 Series)

I.S. probes XMT-SI-485 LOG Series

This Magnetostrictive probe belongs to the same family of XMT-SI-485 with data logger functionality which is automatically activated when the external power supply and/or data is off.

LOG operating mode

When external power supply is present, as the normal case, the probe works as usual replying to the polling protocol. When the power/data is off, an internal battery is automatically connected to the electronics to store movement data in its internal memory which is available for download when the power is restored. This option is available both for new probes and existing probes as a retrofit.

Black Seal XMT LOG theft-proof with memory

PATENTED

This Magnetostrictive XMT-SI-LOG smart-probe belongs to the same family as XMT-SI but with data logger function and with floats (fuel and water) integrated in a 2" stainless steel shaft up to 5,5 meters, suitable for gasoline and diesel fuel.

Different versions for different applications:

- radio wireless, battery powered
- wired RS485 LOG: tank level data saving in case of power failure, 1 month of memory.

Black Seal main features

Bend-proof, strong 2" stainless steel shaft.

Integrated floats: preventing theft attempts, suitable for turbulent flowing liquids.

Memory: data saving in case of power failure; should cable be cut or removed, data are saved in probe internal memory.

Supports tele-diagnostic /maintenance functions, remote configuration of operation parameters.

Connection to the tank: inside riser

Circular connection

Power supply: 12 VDC / battery

RS485 serial port / antenna.

IP68 protection (submersible up to 1,2 m. per 24 hours)

Calculation of data relating to:

- Product level in 0,01 mm
- Interface level in 0,01 of mm. (water presence detection)
- Product mean temperature up to max. 5 integrated digital sensors

Standard measuring accuracy: +/- 0,5 mm

Standard resolution: +/- 0,01 mm

Temperature accuracy range -20 +70 °C: +/- 0,2 °C

Temperature resolution: ± 0,0625 °C

Certifications

Explosion proof ATEX certifications

INERIS 06ATEX0051  II 1/2 GD Ex d IIA T6
Ex tD A21 IP66/68 T85 °C Tamb: -20 °C to 60 °C

CESI 06ATEX 020  II 1/2 G Ex db II 2 Ex tb IIIC
T 85 °C IP67

Intrinsically safe ATEX certifications

CEC 09 ATEX131 Rev. 4  II 1G Ex ia IIB T4 Ga

 II 1D Ex ta IIIC T 135 °C Da IP66/68

FISCO Field Device Ex ta IIC T4

Metrological certifications

OIML R85/2008-CZ-11.03 of 29.06.2011
for fixed tanks

Probes XMT



Fuel quality analysis and product identification

- Fuel Density ρ (kg/m³)
- Fuel Viscosity μ (cp)
- Fuel Dielectric constant ϵ

- Temperature (°C)
- Multi-parametric calculation

DVD description

The DVD TUNING FORK sensor directly and simultaneously measures the viscosity, density, dielectric constant, temperature of fuels.

Relying on patented tuning fork technology, the sensor monitors the direct and dynamic relationship between multiple physical properties to determine the quality, condition and contaminant loading of fuels such as diesel biodiesel, gasoline, Jet fuel, kerosene, biodiesel concentration and urea quality.

The multi-parametric analysis capability improves fluid characterization algorithms.

The DVD provides in-line monitoring of fluids for a wide range of applications including fuel tanks, process lines and pressurized high flow conduits.

A digital serial compliant protocol provides easy to connect interface to Consoles controller.

PATENTED

DVD features

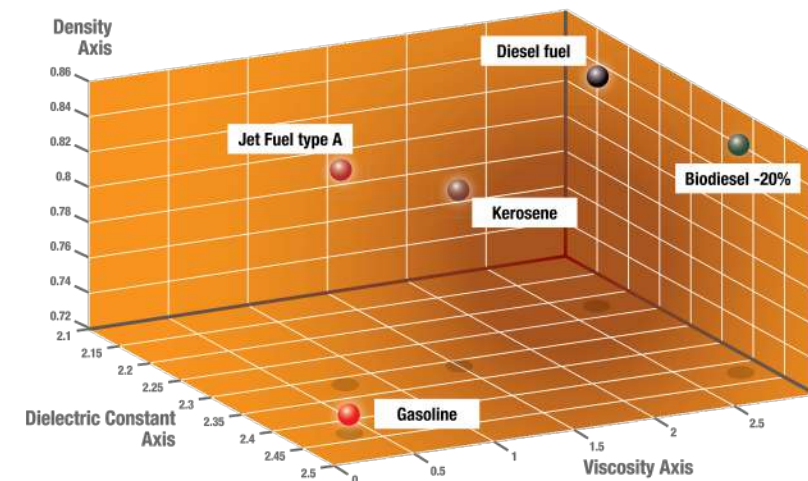
- Patented Tuning Fork Technology with high accuracy
- Static and direct measurement, no moving parts, resistant to turbulence
- Rugged construction for high pressure and high flow environments
- Proprietary corrosion and contaminant resistant coating for wetted parts
- On-board microprocessor for real-time data analysis
- Highly reliable and long term stability
- ATEX Compliance, suitable for 0 zone.

DVD application

- Density solution for retail and depots automation
- Real time fuel quality
- Biodiesel in diesel concentration
- Anti-crossover fuels detection
- Sump and interstitial sensors with liquid discriminating (empty status / type of fuel / water).

Fuel types

Simultaneous measurement with DVD sensor for three physical properties enables absolute fuel fingerprint analysis to confirm fuel type.



Circular connector version

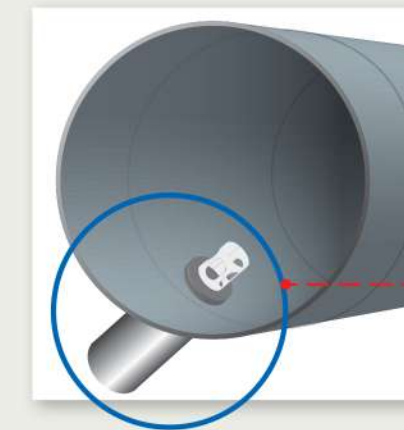


Cable gland version

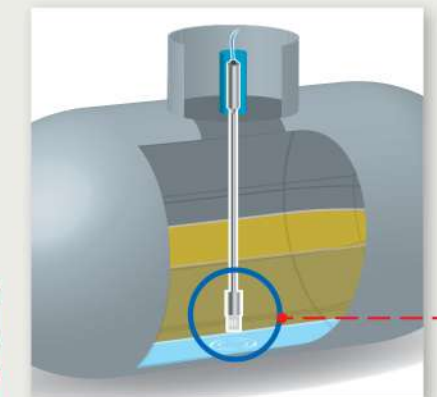
Black Seal DVD



Fuel quality sensor software



In-line, continuous process density monitoring for pipe installations



In tank density meter up to 20 meters