

# WETSTOCK MANAGEMENT

## Magnetostrictive probes and consoles

State of the art Magnetostrictive ATG Technology and automatic tank gauge.



- Level
- Temperature
- Density

SERVICE STATIONS  
AND DEPOTS



# PROBES

## TECHNOLOGY

Petrotec has developed a complete tank management system for fuel service stations, depots, and road tankers.

This system is based on magnetostrictive level gauge technology, the only system able to guarantee accuracy in the order of 0,01 mm.



## GENERAL CHARACTERISTICS

- Ultra-high accuracy OIML R8S CERTIFIED
- Full stainless steel AISI316 enclosure
- IP68 protection up to 10m water submersion for 24h
- Reliability and robustness
- Sharp leakage control
- Ultra compact design
- Power supply 12-30 Vdc
- RS48S serial port



## CONTINUOUS DENSITY MEASUREMENT TECHNOLOGY

### ADVANTAGES:

- Continuous density measurement
- High accuracy
- No blind zone
- No affected by spring drive (minimum error)
- Low maintenance
- AISI316 and NBR construction
- Possibility to configure programmable alarms
- Suitable for gasoline / diesel and LPG

Density feature measures and reports the density of fuel in a tank using the same probe with a lower density float above the product float (floating on the product's surface).

The liquid density is calculated in the surface layer by measuring the distance between float for fuel level and the density float.

The probe sends all data directly to the console, including density.

## PRECISION EXD/SS EXPLOSION-PROOF MAGNETOSTRICTIVE LEVEL GAUGE

**TANK CONNECTION:**  
threaded or flanged

Operates without the barrier and interfaces directly with any controller via RS48S.



### METROLOGICAL DATA

Product level / mm
Product average temperature
Water detection
Measure accuracy: ± 0,25 mm

OIML R8S CERTIFIED
Probe resolution: ± 0,01 mm
Temperature accuracy: ± 0,2 °C

ATEX Certificate: AR18ATEX129rev1 Ex II 1 / 2 G Ex h / Ex db IIB T6 Ga/Gb (IP68)  
ATEX Certificate: AR18ATEX023 Ex II 1 / 1 G Ex h / Ex ia IIB T6 Ga/Ga (IP68)  
FISCO FIELD DEVICE Tamb: -40 +70°C

# PRECISION RS485

## WIRED RS485 MAGNETOSTRICTIVE LEVEL GAUGE

### TANK CONNECTION:

in riser, threaded, or flanged



The standard level gauge for service stations and underground tanks. Suitable for in-riser application (0 zone). Works with an active or passive barrier.

#### METROLOGICAL DATA

Product level / mm

Product average temperature

Water detection

Measure accuracy: 0,25 mm

OIML R8S CERTIFIED

Probe resolution: 0,01 mm

Temperature accuracy: 0,2 °C

### INTRINSICALLY SAFE, SUITABLE FOR 0 ZONE.

ATEX Certificate: AR18ATEX023 II 1 / 1 G Ex h / Ex ia IIB T6 Ga/Ga (IP68) • FISCO FIELD DEVICE Tamb: -40 +70°C

# PRECISION RTD

## WIRELESS MAGNETOSTRICTIVE LEVEL GAUGE

Easy and fast installation. Avoid all excavation and cabling costs, reduce installation time, and eliminate negative consequences due to unstable power supply and possible interferences.

At the same ensuring reliable and safe data transmission, even under challenging conditions: metallic lid cover, concrete sump, and heavy traffic on the station forecourt.

- Transmission frequency 169 MHz
- Intrinsically safe suitable for Ozone
- Battery powered
- Ultra low power mode

- Data transmission up to 3 km on air
- Battery life up to 3 years
- No costs for cabling and digging
- Fast and easy installation



#### METROLOGICAL DATA

Product level / mm

Product average temperature

Water detection

Measure accuracy: ± 0,25 mm

OIML R8S CERTIFIED

Probe resolution: ± 0,01 mm

Temperature accuracy: ± 0,2 °C

### INTRINSICALLY SAFE, SUITABLE FOR 0 ZONE.

ATEX Certificate: AR18ATEX023 II 1 / 1 G Ex h / Ex ia IIB T6 Ga/Ga (IP68) • FISCO FIELD DEVICE Tamb: -40 +70°C



# PRECISION FX

## FLEXIBLE MAGNETOSTRICTIVE LEVEL GAUGE - WIRED AND WIRELESS FOR DEPOTS

The perfect solution to keep your stock under control.

Easy and fast installation, high accuracy.

### INTRINSICALLY SAFE, SUITABLE FOR 0 ZONE.

Wired and wireless versions • Suitable for density float  
ATEX Certificate: AR18ATEX023 II 1 / 1 G Ex h / Ex ia IIB T6 Ga/Ga (IP68) • FISCO FIELD DEVICE Tamb: -40 +80°C

#### METROLOGICAL DATA

Product level / mm

Product average temperature

Water detection

Measure accuracy: ± 1,00 mm

OIML R8S CERTIFIED

Probe resolution: ± 0,05 mm

Repeatability: ± 0,2 mm



# CONSOLES

## PRECISION



### SYSTEM CHARACTERISTICS

CPU Cortex ARM A7 @ 528 MHz processor

512 Mb DDR3L memory

Storage event recording (8Gb micro-SD card)

### MECHANICAL CHARACTERISTICS

IP 41 protection degree enclosure

Enclosure dimensions 280 x 170 x 60 mm

### INTEGRATED INTRINSICALLY SAFE BARRIER (8 TANKS)

Enclosure dimensions 280 x 170 x 60 mm

ATEX Certificate: AR18ATEX039 (Ex) I (1)G [Ex ia Ga] IIB (FISCO POWER SUPPLY) Tamb = -20 +40 °C

### MAIN FEATURES • WET STOCK MANAGEMENT UP TO 36 TANKS

Wet stock management up to 35 tanks

Wide graphical display 7" TFT touch screen

Easy and smart configuration tools local or web interface

Interface protocols with the main communication protocols (Gilbarco, Doms, Dresser Wayne, Tokheim ...)

Automatic reconciliation

Dynamic and statically leakage

Tank auto-calibration

Deliveries, trends, events, alarms recording

Pressure Level Leak Detection management (PLLD)

The display shows:

- Product level/mm
- Interface level/mm (water presence detection)
- Real and compensate volume at 15 °C in liters
- Product mean temperature 5 temp. sensors
- Volume of empty part in liters (ullage)

### ELECTRICAL CHARACTERISTICS

Power supply 100-230 VAC

8 programmable input channels I/O digital or analogic 4-20 mA two wires

Up to 4 programmable relais 125VAC 2A SPDT alarms output

RS 485 field bus wiring

2 RS 232 (communication to POS and/or serial printer)

Ethernet port

2 USB ports

## PRECISION TFT



### MAIN FEATURES

DISPLAY manages up to 8 tanks

Colour 3,5" TFT touch screen display

Tank strapping table (100 linearization)

The display shows:

- Product level/mm
- Interface level/mm (water presence)
- Real and compensate volume at 15 °C
- Product mean temperature 5 temp. sensor
- Volume of empty part in liters (ullage)

### ELECTRICAL CHARACTERISTICS

4 programmable input channels I/O digital or analogic 4-20 mA two wires

Up to 4 relais 125VAC 2A SPDT alarms output programmable

2 RS 485 field bus and system wiring

RS 232: external serial printer

ATEX Certificate: AR18ATEX129rev1 (Ex) II 1 / 2 G Ex h / Ex db IIB T6 Ga/Gb (IP68)

# PRECISION MARS

## MAIN FEATURES

Explosion proof design

Manages up to 4 tanks

Color 3,5" TFT graphical display

Tank strapping table up to 100 lin. pts.

The display shows:

- Product level/mm
- Interface level/mm (water presence)
- Real and compensate volume at 15 °C
- Product mean temperature 5 temp. sensor
- Volume of empty part in liters (ullage)

## MECHANICAL CHARACTERISTICS

Aluminum pressure casting enclosure IP 68 (1m. water submersion)

2 buttons to power on by battery and to change the pages

## ELECTRICAL CHARACTERISTICS

N. 4 programmable input channels I/O digital/analogic 4-20 mA

Up to N. 4 relais 125VAC 2A SPDT programmable alarms output

N. 2 RS 485 field bus and wiring

RS 232: external serial printer



ATEX Certificate: AR18ATEX129rev1 II 1 / 2 G Ex h / Ex db IIB T6 Ga/Gb (IP68)

# PRECISION PRN



## PRINTER

Wall mounting printer

Polycarbonate IP41 enclosure

200 dpi high-quality speed

Width paper 58 mm

Paper 55-70 g/mq, Ø 50 mm

Power supply 220Vac

4Mb flash internal memory logos and fonts

RS232 interface

International fonts available

Sensors: temperature head, paper presence

UL, CE, FCC compliance

Temperature extended -20 +70°C

# ATEX INTRINSICALLY SAFE ACTIVE BARRIER

The device is a safety barrier FISCO power supply with ATEX certified galvanic isolation with "intrinsic safety" protection mode and is suitable for supplying FISCO field bus circuits.

The safety barrier is used to interface level probes positioned in a hazardous area (zone 0, 1, 2). The safety barrier is equipped with a connector for power supply, data connection from the host and an RS232 service connection. A maximum of 8 probes can be connected to each barrier (2 for each output connector).



ATEX Certificate: AR18ATEX039 II (1)G [Ex ia Ga] IIC/IIB/IIA (FISCO POWER SUPPLY) Tamb: -40 + 65°C

# ISB - ATEX INTRINSICALLY SAFE PASSIVE BARRIER

This passive barrier is suitable for the connection of certified sensors installed in Zone 0 (1G): a place in which an explosive atmosphere consisting of a mixture of air and flammable substances in the form of gas, vapor, or mist is present continuously or for long periods.



ATEX Certificate: AR18ATEX039 II (1)G [Ex ia Ga] IIB (FISCO POWER SUPPLY) Tamb = -20 +40 °C