



# 2024 **Product Catalogue**

Order from: C A Briggs Company

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Accelerating Innovation 🕪 iconprocon.com



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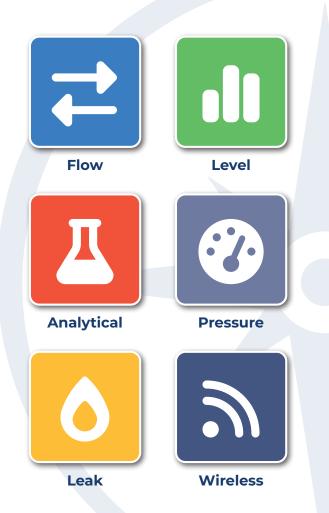
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**₽** 

#### In-Line Plastic Paddle Wheel Flow Meter

Industry's Highest Accuracy: +/- 0.5%

Lifetime Warranty on Paddle Assembly











#### TK Series — In-Line Plastic Paddle Wheel Flow Meter

#### Industry's Most Accurate & Reliable Paddle Wheel Flow Meters

The TK Series in-line plastic paddle wheel flow meter has been engineered to provide long-term, accurate flow measurement in tough industrial applications.

The paddle wheel assembly consists of an engineered Tefzel® paddle and micro-polished zirconium ceramic rotor pin and bushings.

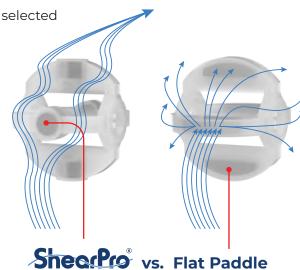
High performance Tefzel® and Zirconium materials have been selected due to their excellent chemical and wear resistant properties.

- √ ½" 4" Line Sizes
- Flow Rate | Total
- Pulse | 4-20mA | RS485 | Voltage Outputs

#### New ShearPro® Design

- Contoured Flow Profile

\*Ref: NASA "Shape Effects on Drag"



#### Tefzel® Paddle Wheel

✓ Superior Chemical And Wear Resistance vs. PVDF

#### Zirconium Ceramic Rotor | Bushings

- ♥ Up to 15x the Wear Resistance vs. Regular Ceramic
- **⊘** Integral Rotor Bushings Reduce Wear and Fatigue Stress



#### 6 Distinct Meters Designed to Exceed Your Flow Expectations

**Battery** 

Pulse + Relay

Pulse | RS485

Pulse | 4-20mA Pulse | Voltage | 4-20mA Battery + Pulse

**TKW** 





**TKS** 





**TKM** 





**TKB** 

**TKP** 

**TCB** 







#### truflo® **TK3 Series**

#### In-Line Stainless Steel Paddle Wheel Flow Meter

- Industry's Highest Accuracy: +/- 0.5%





#### TK3 Series — In-Line 316 Stainless Steel Paddle Wheel Flow Meter

#### **Industry's Most Accurate & Reliable Paddle Wheel Flow Meters**

The TK3 Series in-line 316 stainless steel paddle wheel flow meter has been engineered to provide long-term, accurate flow measurement in tough industrial applications.

The paddle wheel assembly consists of an engineered Tefzel® paddle and micro-polished zirconium ceramic rotor pin and bushings.

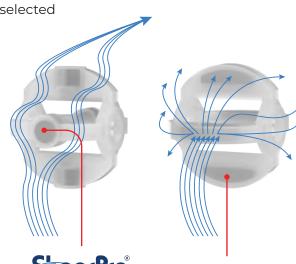
High performance Tefzel® and Zirconium materials have been selected due to their excellent chemical and wear resistant properties.

- √ ½" 4" Line Sizes
- Flow Rate | Total
- Pulse | 4-20mA | RS485 | Voltage Outputs

#### **New ShearPro® Design**

- Contoured Flow Profile
- 78% Less Drag than Old Flat Paddle Design\*

\*Ref: NASA "Shape Effects on Drag"



#

Sheare vs. Flat Paddle

#### Tefzel® Paddle Wheel

Superior Chemical And Wear Resistance vs. PVDF

#### Zirconium Ceramic Rotor | Bushings

- ♥ Up to 15x the Wear Resistance vs. Regular Ceramic
- **⊘** Integral Rotor Bushings Reduce Wear and Fatigue Stress



#### 6 Distinct Meters Designed to Exceed Your Flow Expectations

**Battery** 









TK3S TK3P TK3W

Pulse | 4-20mA Pulse | Voltage | 4-20mA Battery + Pulse

TC3B







TK3B





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#### Insertion Plastic Paddle Wheel Flow Meter

Industry's Highest Accuracy: +/- 0.5%

Lifetime Warranty on Paddle Assembly

No Programming



**M12 Quick Connection** 

**True Union Design** 

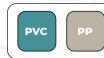
NPT Connection

PVC | PP | PVDF

PT | PPT | PFT — Tee Fittings













#### **TI Series** — Insertion Plastic Paddle Wheel Flow Meter

#### Industry's Most Accurate & Reliable Paddle Wheel Flow Meters

The TI Series insertion plastic paddle wheel flow meter has been engineered to provide long-term, accurate flow measurement in tough industrial applications.

The paddle wheel assembly consists of an engineered Tefzel® paddle and micro-polished zirconium ceramic rotor pin and bushings.

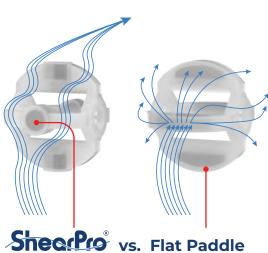
High performance Tefzel® and Zirconium materials have been selected due to their excellent chemical and wear resistant properties.

- 1/2" 24" Line Sizes
- Flow Rate | Total
- Pulse | 4-20mA | RS485 | Voltage Outputs

#### **New ShearPro® Design**

- Contoured Flow Profile
- Reduced Turbulence = Increased Longevity
- 78% Less Drag than Old Flat Paddle Design\*

\*Ref: NASA "Shape Effects on Drag"



#### Tefzel® Paddle Wheel

Superior Chemical And Wear Resistance vs. PVDF

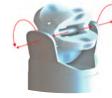
#### Zirconium Ceramic Rotor | Bushings

- **⊘** Up to 15x the Wear Resistance
- ✓ Integral Rotor Bushings Reduce Wear and Fatigue Stress

#### 360° Shielded Rotor Design

- **Eliminates Finger Spread**
- No Lost Paddles





SnearPro vs. Competitor

#### 5 Distinct Meters Designed to Exceed Your Flow Expectations

Flow & Total (Battery)

Flow & Total (Pulse | RS-485)

Flow & Total

(Pulse | 4-20mA)



Flow, Total & Batching (Pulse | 4-20mA | Voltage)









**TIR** 





**TIP** 

TIF

Industry's Highest Accuracy: +/- 0.5%

No Programming

Flow Rate

and Total

**Bright LED** 

Lifetime Warranty on Paddle Assembly

# TI3 Series — Insertion Stainless Steel Paddle Wheel Flow Meter

# Industry's Most Accurate & Reliable Paddle Wheel Flow Meters

The TI3 Series insertion 316 stainless steel paddle wheel flow meter has been engineered to provide long-term, accurate flow measurement in tough industrial applications.

The paddle wheel assembly consists of an engineered Tefzel® paddle and micro-polished zirconium ceramic rotor pin and bushings.

High performance Tefzel® and Zirconium materials have been selected due to their excellent chemical and wear resistant properties.

- √ ½" 24" Line Sizes

Rotates 330°

**316SS** 

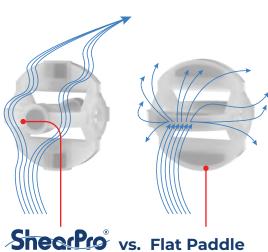
RoHS (

Pulse | 4-20mA | RS485 | Voltage Outputs

#### New ShearPro® Design

- **⊘** Contoured Flow Profile
- Reduced Turbulence = Increased Longevity
- 78% Less Drag than Old Flat Paddle Design\*

\*Ref: NASA "Shape Effects on Drag"



#### Tefzel® Paddle Wheel

Superior Chemical And Wear Resistance vs. PVDF

#### Zirconium Ceramic Rotor | Bushings

- **⊘** Up to 15x the Wear Resistance
- Integral Rotor Bushings Reduce Wear and Fatigue Stress

#### 360° Shielded Rotor Design

- Eliminates Finger Spread
- No Lost Paddles





SnearPro vs. Competitor

#### 5 Distinct Meters Designed to Exceed Your Flow Expectations

Flow & Total (Battery)



Flow & Total (Pulse | RS-485)



Flow & Total (Pulse | 4-20mA)



TI3M

**Flow Rate** (Pulse | 4-20mA + Relay)





TI3R



TI3B

TI3P

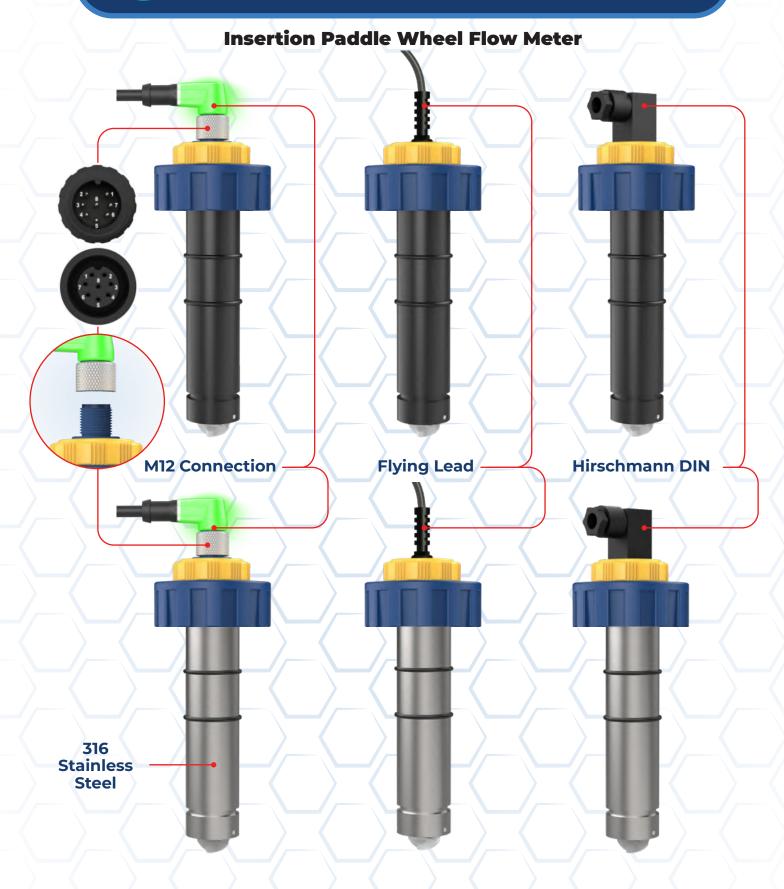
# Corrosion-Free Instrumentation Equipment



**Sanitary Connection** 

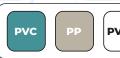
Insertion Stainless Steel Paddle Wheel Flow Meter

# truflo TIW / TI3W Series















### TIW/ TI3W Series — Insertion Paddle Wheel Flow Meter

#### Industry's Most Accurate & Reliable Paddle Wheel Flow Meters



The TIW/TI3W series insertion plastic/316 stainless steel paddle wheel flow meter has been engineered to provide long-term, accurate flow measurement in tough industrial applications.

The TIW/TI3W insertion flow meter is a blind unit that provides a frequency pulse output and is available with an M12 connection, flying lead or a Hirschmann DIN quick disconnect.

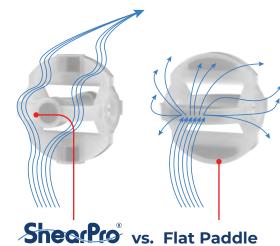
The paddle wheel assembly consists of an engineered Tefzel® paddle and micro-polished zirconium ceramic rotor pin and bushings. High performance Tefzel® and Zirconium materials have been selected due to their excellent chemical and wear resistant properties.

- 1/2" 24" Line Sizes
- **Pulse Output**

#### New ShearPro® Design

- Contoured Flow Profile
- Reduced Turbulence = Increased Longevity
- 78% Less Drag than Old Flat Paddle Design\*

\*Ref: NASA "Shape Effects on Drag"



#### Tefzel® Paddle Wheel

**⊘** Superior Chemical And Wear Resistance vs. PVDF

### Zirconium Ceramic Rotor | Bushings

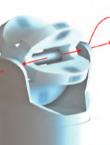
- ♥ Up to 15x the Wear Resistance vs. Regular Ceramic
- **⊘** Integral Rotor Bushings Reduce Wear and Fatigue Stress

#### 360° Shielded Rotor Design

- **Eliminates Finger Spread**
- No Lost Paddles











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truflo®

- No Contact with Liquid 4-20mA | RS485 Output
- **Simple Programming**
- No Moving Parts
- **Data Logging**

### No Pipe Cutting

- Flow Rate + Totalizer | Resettable
- Works on: Carbon Steel | Stainless Steel | PVC | Copper | PVDF | PFA | PTFE PU | Aluminium

**Ultra-Convenient.** Ultra-Versatile. **Ultra-Simple** — UltraFlo®

Chemical Resistant, **High Impact Polycarbonate Cover** 

M12 Quick Connection

**Bright LED Display** 







**Flow Rate and Total** 

**Teflon® Epoxy** 

**Coated Aluminum** 





#### Convenience, Accuracy and Value in an Ultrasonic Flow Meter

The TruFlo® UF500 Series Clamp-On Ultrasonic Flow Meters are easy to install with exceptional long life performance and requires no alteration to current piping configurations.

The sensor sends over 50 pulses/sec in order to provide accurate measurement of liquid flow rates in full pipes and can be used in low pressure systems.

- Wide dynamic flow range of 0.1 to 15 ft/s | 0.03 to 5 m/s
- High Accuracy | ± 2.0% of Full Scale
- Lightweight
- **Excellent external corrosion resistance**

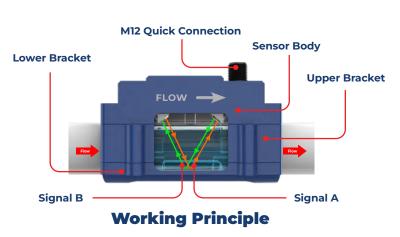
#### **Working Principle**

Traditional flow meters have long relied on the principle of measuring flow by tracking the time it takes for an ultrasonic pulse to journey from a transmitting element to a receiving element. As flow rates increase, the signal accelerates, and transmission time diminishes, allowing for a direct correlation to the instantaneous flow rate.

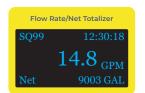
However, we at ICON have redefined this conventional approach to flow measurement with our innovative UF-500 Series. Our technology stands out by concurrently monitoring two signals: one in the direction of flow and the other against it. This groundbreaking dual-signal monitoring system ensures that our readings remain consistently accurate and stable, regardless of external variables such as clogging or temperature fluctuations.

#### M12 Quick Connection

- Replaces Flying Lead Connections
- **Reduces Setup Time**
- Watertight Design











	ow Rate/Velocity /Net Totalizer
SQ99	12:30:18
	3.8 f/s
Flow	895.2 GPM
Net	203119 gal
	SQ99 Vel Flow



#### UltraFlo® 1000, 2000, 4000 & 5000 — Ultrasonic Flow Meters

#### UltraFlo® 1000

- Obsigned for Dosing | Pulsating Flows
- All PFA Teflon®
- **Flared Tubing Connections**
- Low Flow Rates: 0.02 LPM | 0.005 GPM

The Ultraflo® 1000 ultrasonic flow meter utilizes ultrasonic technology to measure both conductive and non conductive liquids, and is an excellent choice for very corrosive liquids such as strong acids and alkalines.



The UltraFlo® 1000 has no moving parts and can measure pulsating, dosing and metering flow applications. All parts that contact the liquid are made of corrosion resistant PFA Teflon®. The UltraFlo® 1000 ultrasonic flow meter is characterized by its high measurement accuracy and repeatability.

#### UltraFlo® 2000

- All Plastic HDPE Wetted Materials
- High Accuracy: ± 1.0%
- **⊘** Superior Corrosion Resistance
- 4-20mA + Pulse Relay Output | RS-485
- **Negligible Pressure Drop**
- Empty Pipe Alarm Air Bubble Detection

The Ultraflo® 2000 ultrasonic flow meter is designed to measure the volume of clean liquid media using sound wave technology. The Ultraflo® 2000 can measure both conductive and non-conductive liquids. The Ultraflo® 2000 ultrasonic flow meter emits 250 sound pulses/min making it an excellent choice for measuring dosing and pulsating flow rates.

There are no moving parts and the full port design equates to a negligible pressure drop. The unique body design minimizes dead space over the whole geometry. All wetted parts in contact with the medium are constructed of virgin HDPE material. The Ultraflo® 2000 is characterized by its high repeatability and excellent measurement accuracy.









#### UltraFlo® 4000

- Design to Measure Very Low Flow Rates
- Suitable for Dosing | Pulsating Flows
- **✓** PVC-CPVC True Union Ends (Optional)
- RS-485 | 4-20mA + Pulse Relay
- Display; Flow Rate + Totalizer
- **IP67 Enclosure**
- **Negligible Pressure Drop**
- **Empty Pipe Alarm**

The UltraFlo® 4000 utilizes ultrasonic technology and is capable of measuring both conductive and non conductive liquids.

It is an excellent chose for very corrosive liquids such as strong acids and alkalies. The UltraFlo® 4000 has no moving parts and has been engineered to measure pulsating, dosing as well as metering flow. All parts that contact the liquid are made of corrosion resistant polysulfone.



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#### UltraFlo® 5000

- Designed for Dosing | Pulsating Flows
- PVDF | PE
- √ ½" | ¾" | 1" | NPT | G Connections
- Low Flow Rates: 0.024 LPM | 0.006 GPM
- **IP67 Enclosure**
- **Negligible Pressure Drop**
- **Empty Pipe Alarm**

The UltraFlo® 5000 flow meter utilizes ultrasonic technology to measure both conductive and non-conductive liquids and is an excellent choice for very corrosive liquids such as strong acids and alkalies.

The UltraFlo® 5000 has no moving parts and can measure pulsating, dosing and metering flow applications. All parts that contact the liquid are made of corrosion-resistant polysulfone.

The UltraFlo® 5000 is characterized by its high measurement accuracy, repeatability and guaranteed long-life performance.



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#### ProPulse®, ProPulse®2 — Turbine Flow Meters

## Precision in Every Drop: Monitoring Low Dosing Flows



# **Good** things come in small packages

#### ProPulse® 2

- **Output** Excellent Chemical Resistance
- Perfect for Metering or Dosing Applications
- ✓ Ultra Low Flow Ranges | 40 ml/min | 0.01 GPM
- ✓ Variety of End Connections:
  - Hose Barb | Threaded | Flared | Straight Pipe
- Compact Lightweight Design









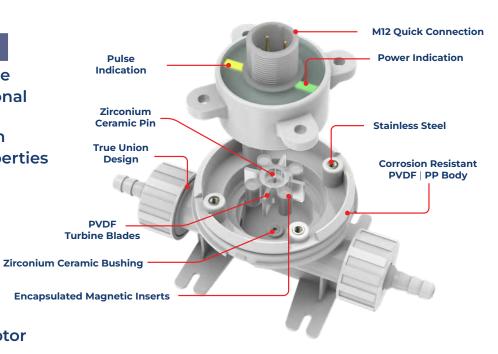
### **Small but mighty**

The ProPulse® 2 provides superior performance and delivers accurate ultra-low flow measurement that is highly repeatable under the most demanding of industrial environments.

The ProPulse® 2 operates using a PVDF rotor with encapsulated magnetic inserts, which rotate on a long-wearing set of zirconium ceramic bushings, designed to provide years of reliability. As the rotor spins, the magnetic field produced by the magnets is picked up via a Hall Effect Sensor, which converts the rotation into a square wave NPN pulse, 4 – 20mA, or RS485 output that can be sent directly to a metering pump or local display.

#### ProPulse® 2 PVDF Turbine

- **⊘** Great Chemical Resistance
- Anti-Stick and Low Frictional Properties
- Excellent Impact Strength
- Superior Mechanical Properties



#### **ProPulse®**

- Sapphire Bearings
- **⊘** Ultra Low Flow Ranges: 50 ml/min | 0.013 GPM
- √ ½" Tube | 3/8" Pipe
- High Accuracy & Repeatability
- **⊘** NPN | PNP Frequency Pulse Output



# truflo®

## **OGF Series**

#### **Oval Gear Flow Meter**

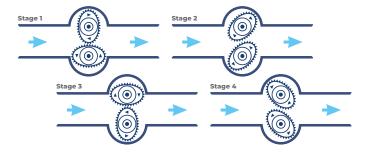


The **OGF Series Flow Meter** is specifically suitable for fluid flow rate measurement of highly viscous media. The OGF incorporates epicycloid wheel design, providing highly precise flow measurement values.

#### Features

- Compact Design
- Precision Oval Gears
- ⊘ Corrosion Resistant Plastic Housing
- **⊘** Ideal for Viscous Liquids
- Easy Installation

#### **Working Principle**







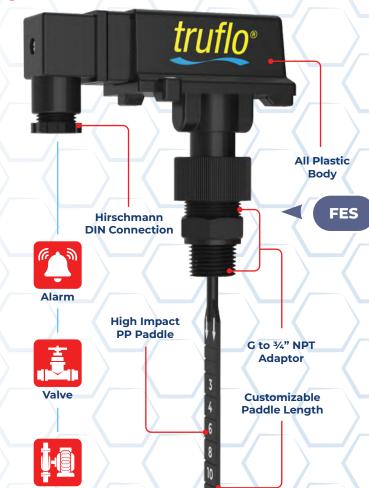
**₽** 

#### **All Plastic Flow Switch**

**Excellent Pump Protection** 

truflo®

- Hirschmann DIN Connection | Wire at Sensor
- **Low Flow Switch Points**



- **⊘** Corrosion Resistant PP Body | Paddle
- 0 1/2 - 12" Pipe Sizes

FES Series | UFS Series

- IP65 | NEMA 4X Enclosure
- Simple Installation Process
- Easily Changed from NO to NC

#### Protect your equipment

The Truflo® FES Series Flow Switch is designed to detect liquid flow or low/no flow.

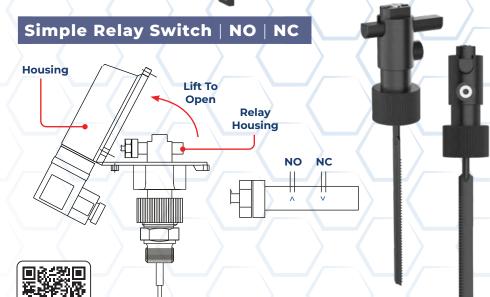
The FES switch encompasses a SPST contact that can be wired to energize a device when liquid flow either exceeds or drops below the set flow rate.

The FES Series is an excellent choice for corrosive liquid services, water treatment, waste treatment, liquid pumping and process control systems.

The FES Flow Switch can control devices such as pumps, motorized valves and alarm devices.

#### Example

- Prevent Pumps from Running Dry
- Notification for Filter | Strainer Change-Out
- Output to Alarm | Shut Off Pump





- RYTON® Body
- Size Range: 1/2" 16"
- **Excellent Pump Protection**



#### Flow Display + Totalizer + Batcher



Sealed

**Push Button** 

**Controls** 

TVF-450

**TVF Series** 

SimplConnect

- 2 Relay Outputs 5Amp + 4-20mA
- **Power Supply Output: 24VDC**
- Flow Rate | Totalizer | Batcher
- **NEMA 4X Enclosure + Cord Grips**

The TVF Series flow display & batcher is the industry's most rugged and reliable wall-mount remote display. The TVF Series will display both flow rate and flow total up to 6 digits.

LevelPro® TVF Series comes as a complete all-in-one unit, out of the box it is ready to use. Included is a bright LED display, NEMA 4X enclosure, polycarbonate faceplate, cord grips and plastic captive screws.

The industrial design of the TVF Series ensures that it will withstand the industry's most corrosive environments.

Available with either 2 relay outputs or 1 relay + 4-20mA output, the TVF Series is great for automating your batching or dosing applications.







truflo®

# MF-1000

#### **In-Line Magnetic Flow Meter**

- No Moving Parts | No Clog Design
- **⊘** Integral Display | Flow | Total | All-in-One











#### **Equipment protection that can handle the pressure**

The Truflo® MF-1000 Series flanged magnetic flow meters provide long-lasting, reliable performance in even the most challenging applications. The MF-1000 is a microprocessor-based flow transmitter that has been engineered for high performance, easy installation, commissioning and maintenance.

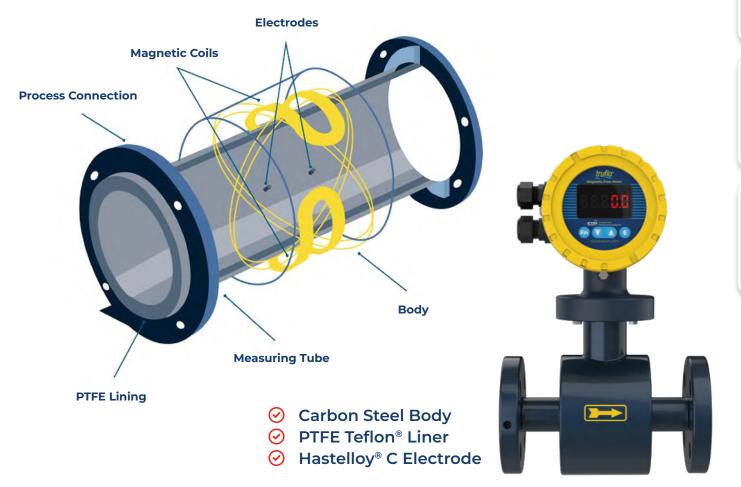
The MF-1000 is truly robust, cost-effective and suitable for all-round applications and has a measuring accuracy of ± 0.5% of the flow rate.

The Truflo® MF-1000 Series comes standard with a PTFE Teflon® liner, carbon steel body and Hastelloy® C electrodes. However, a variety of materials are available to ensure the flow meter is chemically compatible with your application.

- Standard PTFE Teflon® Liner
- High Accuracy: ±0.5% F.S.
- **Excellent Chemical Resistance**
- Full Port Design
- NEMA 4X | IP 68 Protection

#### **Magnetic Flow Meter Structure**

#### Working Principle Based on Faraday's Law of Electromagnetic Induction







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# 100 Series

#### **Continuous Submersible Level Transmitter**

- **⊘** Higher Accuracy | Superior Chemical Resistance
- Works on Foam | Vapor | Turbulence | Condensate
- **⊘** Integrally Molded Internal Weight | No Floating









The 100 Series can be connected to one of our many displays.

#### ShoPro® Display







# ı

### **Continuous Submersible Level Transmitter and Junction Box**

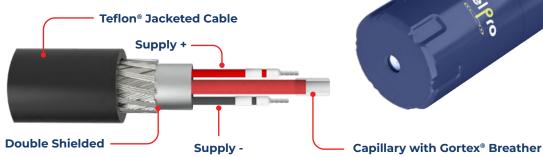
# The Solution to Tough Applications Where Ultrasonic Sensors Simply DO NOT WORK!

The LevelPro® 100 Series continuous submersible level transmitter and tank level junction box are a perfect pair for applications where ultrasonic sensors aren't going to work.

Accurately measure tank levels with this rugged combination that's simple to use and boasts superior chemical resistance along with industry exclusive features.



- **⊘** Integral Weight | No Floating
- **⊘** Teflon® Jacketed Cable
- **⊘** High Accuracy: ±0.5%







- 2" NPT Tank Connection
  - VaporBloc® Sealing System

    (Prevents corrosive vapors from escaping through the





# **Liquid Level Switches**

#### FloatPro® | TFS

#### PLF — Liquid Level Float Switch

- **Up to 8 Relay Contacts**
- Flange | NPT Connection
- PVC | PP | PVDF | 316 SS
- **No Power Required**

The PLF Liquid Level Float Switch provides liquid level detection up to 8'(2.4m) with 1-8 level switch points and a compact junction box for wiring termination. This all plastic level switch package is selected for day tank, skid or machine, cooling tower, waste sump or process tank applications, and can be connected directly to a PLC or relay controller. It makes a perfect on | off switch for pumps or valves and can be used to completely automate your tank. The PLF is only suitable for non-viscous and non-coating liquids.





✓ Low Profile | Quick Installation

No Power Required | 2 Wire Reed Switch

Horizontal | Vertical Orientation

All Plastic Design

(Excellent Corrosion Resistance)

High/Low Level Indication

#### The LevelPro® PLS Series compact level switches combine affordability, reliability, and simple installation.

The all plastic level switches contain a hermetically sealed reed switch that is actuated by magnets that are permanently bonded inside the float. They can be easily adapted to open or close a circuit based on the rising or falling of the liquid level.

Switch ratings are suitable for many solid-state control systems and small monitors or alarms. Simple relay interfaces can be used for higher current applications such as pumps and on-off valve actuators



#### FloatPro® PP Ball Float Valve

- 5 Adjustable Positions
- **Robust Construction**
- **Material Choice for Internal Seat**
- No Tools Required to Adjust the Ball
- **Cost Effective Tank Level Control**

#### Introducing the New FloatPro® Series with an Adjustable Cam

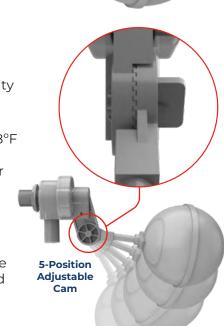
The Ball Float Valve incorporates an adjustable cam to give more flexibility in situations where adjusting fluid levels is essential and it resolves the problem of the type 'A' air gap.

The internal seat (EVA Polythene) has a working temperature of up to 158°F (70°C), and has excellent chemical resistance. The internal EPDM rubber has a working temperature of up to 194°F (90°C), and has an even greater resistance to a wider range of aggressive chemicals than EVA.

The FloatPro® Series has two polypropylene internal valve seats and is available in standard bore for a normal flow of liquid and a large bore allowing a greater flow of liquid.

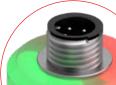
The robust construction and leak-free design ensure a long, maintenance free operating life. Once installed they can be left to perform the required function without the constant need for supervision.

If it ever does require maintenance, it's designed to unscrew from the centre for easy access.



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Red & Green

**Status Lights** 

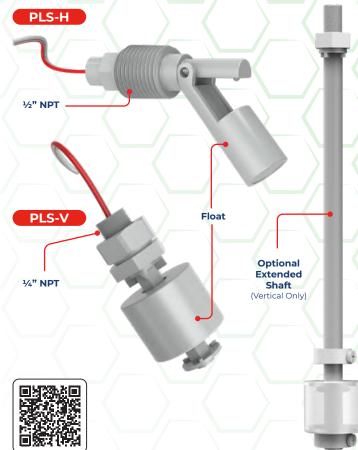






- Corrosion Resistant Teflon® Coated SS
- Suitable for Dense Foam | Viscous Liquids
- **Excellent Choice for Coating Liquids**
- 2" 16" Lengths
- **NPT Connection**
- **Relay Output**

The TFS Series is a vibrating type level switch for use in all liquid and slurry applications such as overflow, high, low, and demanding applications, as well as pump protection. The TFS Series is designed for industrial use in all areas of process technology and can be used with liquids and slurries. With a tuning fork insertion length of only 45 mm (1.77"), the TFS switch can be mounted in small pipes and applications with confined space. The TFS Series can be used in difficult conditions including turbulence, air bubbles, and foam.



# UltraPro® Series

#### **UPS-2000 Ultrasonic Level Sensors**

#### UltraPro® 2000 Ultrasonic Level Transmitter

- ♥ Up to 0.15% Accuracy
- **Small Dead Band**
- Simple Programming | Under 1 minute
- Field Adjustable
- Loop Powered | 2 Wire (4-20mA) Output
- **Explosion Proof Option**

The UltraPro® 2000 Ultrasonic Level Transmitters are 2-wire loop-powered sensors designed to provide reliable and accurate continuous liquid level measurement. The UltraPro® 2000 Series are exceptionally reliable and offer both 4-20mA analog output with HART protocol or RS-485 Modbus.

Some key applications for the UltraPro® 2000 include: chemical storage tanks, waste sumps, bulk storage, tanker trucks, day tanks, process tanks, neutralization tanks, and wastewater applications.

The UltraPro® 2000 Series are designed to work with most types of remote instrumentation such as remote displays and remote monitoring solutions.















# **TPP Series**

#### **PTFE Teflon® Temperature Sensor**

- **⊘** Teflon® Provides Superior Corrosion Resistance
- **Customizable Lengths | Ranges**
- Phenomenal Accuracy | ± 0.5% F.S.
- **Large Temperature Range Capabilities**
- Hirschmann DIN Connector
- **Suitable for Sticky Liquids**
- 2-Wire 4-20mA Loop Powered
- **Local LED Display Option**
- **No Calibration Required**



**Optional UMD-4 Local Display** 

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#### Viewsonic Ultrasonic Level Sensor

- **Battery Operated**
- **Approx. 5 Years Life Expectancy**
- **Digital LCD Display**
- All Plastic Design
- **NEMA 4X Plastic PP Enclosure**
- **Non-Contact Technology**
- **Wireless Communication to Remote Display** over 200ft
- Remote Applications | No Wiring Required
- Low/High Level Display Indication





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# ProScan®

#### ProScan® Radar Level Transmitter (26GHz)

- **⊘** Excellent For Foam | Vapor
- All Thermoplastic Housing | Antenna
- Simple Configuration

**NEMA 4X Enclosure** 

**PP Cord Grips** 

**ABS Thermoplastic Housing** 

**High Impact Enclosure** 

**Back-lit LCD Display** 

Level Pro

**Push Button Programming** 

**Visual Level Indication** 





**PTFE Antenna** 



2" NPT Connection



### ProScan® Radar Level Transmitter (26GHz)

#### The simple contact-free solution for corrosive, coating, dirty, or crystallizing applications with virtually zero maintenance required

The ProScan® Radar Level Transmitter reliably measures the liquid level inside a tank or sump of both corrosive and non-corrosive liquids.

Utilizing a completely PTFE Teflon® antenna or horn, it sends and receives low-energy radar pulses and calculates the time of flight of the pulse in order to determine your level reading. It's both reliable and accurate, with no requirement for re-calibration.

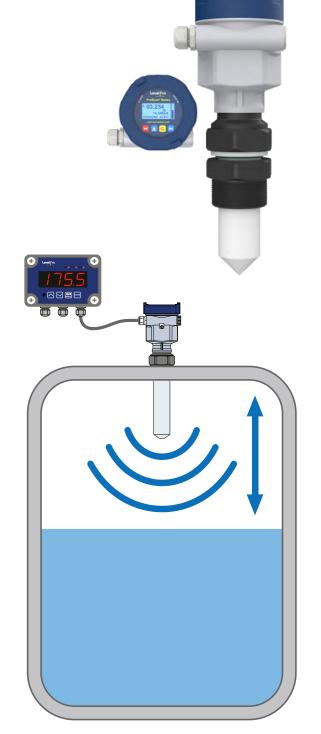
#### **ProScan® Level Transmitter**

- **⊘** 26GHz
- **⊘** Plastic Design | Chemical Resistant
- **⊘** Loop Powered | 2 Wire 4-20mA Output
- **⊘** EX ATEX Rated
- 33 ft | 10m Measuring Range

#### **Working Principle**

The ProScan Radar Level Transmitter does not contact the process liquid and therefore is an excellent choice for applications that may be corrosive, coating, dirty, or crystallizing.











# ProScan® 2

#### ProScan® 2 Radar Level Transmitter (80GHz)

- Excellent For Foam | Vapor
- All Thermoplastic Housing | Antenna

**NEMA 4X Enclosure** 

**PP Cord Grips** 

**ABS Thermoplastic Housing** 

**High Impact Enclosure** 

**Back-lit LCD Display** 

Level Pro 89.236 19.999mA

> **Push Button Programming Visual Level Indication**



2" NPT Connection

**PTFE Antenna** 









### ProScan® 2 Radar Level Transmitter (80GHz)

#### The simple contact-free solution for corrosive, coating, dirty, or crystallizing applications with virtually zero maintenance required

The ProScan® Radar Level Transmitter reliably measures the liquid level inside a tank or sump of both corrosive and non-corrosive liquids.

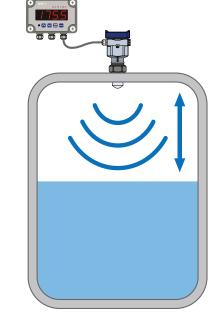
Utilizing a completely PTFE Teflon® antenna or horn, it sends and receives low-energy radar pulses and calculates the time of flight of the pulse in order to determine your level reading. It's both reliable and accurate, with no requirement for re-calibration.

#### **ProScan® 2 Level Transmitter**

- ⊗ 80GHz
- **⊘** Plastic Design | Chemical Resistant
- Small Dead-Band
- Simple Programming
- Loop Powered | 2 Wire 4-20mA Output
- **EX ATEX Rated**
- No Moving Parts
- 33 ft | 10m Measuring Range

#### **Working Principle**

The ProScan Radar Level Transmitter does not contact the process liquid and therefore is an excellent choice for applications that may be corrosive, coating, dirty, or crystallizing.



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## **ShoPro® Display**







**PTFE** 

316 Stainless Steel

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**Plastic Tank** 

# ProScan® 3

#### ProScan® 3 Radar Level Transmitter (80GHz)





#### **ProScan® 3 Radar Level Transmitter (80GHz)**

#### The future of non-contact level measurement is radar technology!

The **ProScan® 3** 80GHz high frequency technology permits a significantly more precise transmission signal focus. This makes it easier to distinguish between actual level signals and interference signals, making the measurement more reliable coupled with a higher degree of accuracy.

The new ProScan® 3 series of compact instruments are ideally suited for more complex level applications.

The 80GHz radar signal is capable of penetrating through the top lid of a tank, eliminating the need for a bulkhead fitting, or having the sensor subject to the conditions inside the tank.

**Emitted Signal** 

Signal

Reaching Liquid 3° Angle

#### **Features**

- Bluetooth Connectivity
- Excellent Reliability and Accuracy
- Not Affected by Vapor or Outgassing
- Polypropylene Transducer
- Integrated Spirit Bubble for Easy Leveling
- Measurement Under Vacuum | High Pressure
- Unaffected by Temperature Fluctuations
- ✓ NEMA 4X | IP68 Protection

#### **Working Principle**

The **ProScan® 3** (80GHz) radar is a transmitter for continuous level measurements using fast sweep Frequency Modulated Continuous Wave (FWCW) technology. The transducer of radar continuously emits signal sweeps with a constant frequency towards the liquid surface. The reflected signal is then captured by the transducer. The time to send and receive is known as the time of flight.







316 Stainless Steel



#### **LevelPro® Level Process Displays**

#### SP100 — ShoPro® Series Level Display

- Super Bright 5 Digit LED Display
- 4-20mA Input
- **NEMA 4X Enclosure**
- **DC Output Supply to Sensor**
- 2 x 5A Relays
- SimplConnect® Cord Grips Included

LevelPro's® SP100 and TVL come as a complete all-in-one unit that's ready to use right out of the box.

Included is a bright LED display, NEMA 4X enclosure, polycarbonate faceplate, cord grips and corrosion-free plastic captive screws.

The industrial design of the SP100 and TVL Series ensures that the units will withstand the industry's most corrosive environments.







Both are available with either 2 relay outputs or 1 relay + 4-20mA, and are well equipped for automating your tank level processes.

#### **TVL Tank Level Display & Controller**

- Ontroller + NEMA 4X Enclosure
- ✓ Input: 4-20mA
- LED Display-Adjustable Light Intensity
- **SunBright Technology for Outdoor Applications**
- 5A Relay Output + 4-20mA Output
- Power Supply Output: 24V DC to Sensor
- **Signal Peak Value Detection**
- SimplConnect® Cord Grips Included









The LevelPro® Level Process Displays and Controllers are the industry's most rugged and reliable wall-mount remote level displays.

#### ITC-250L Loop Powered Level Display

- Loop Powered
- Input: 4-20mA
- **NEMA 4X Enclosure**
- SimplConnect® Cord Grips Included



Chameleon

Color Display



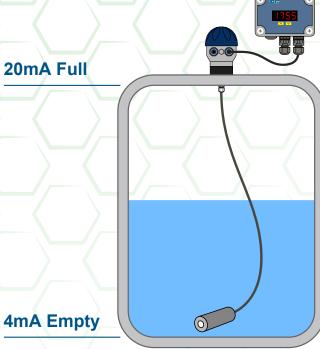
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#### ITC-250B Battery Powered Level Display

- LiSOCI2 Lithium Battery Powered (Industry's Longest Lasting Industrial Battery)
- Input: 4-20mA
- SimplConnect® Cord Grips Included
- NEMA 4X Enclosure







# **TVU Series**

#### **LevelPro® TVU Universal Process Displays**

# It's kind of a big deal













Bright

- Programmable LED Colors with SunBright® Technology for Outdoor Applications
- Universal Inputs Level | Flow | Pressure | Temperature
- **⊘** 8 Levels of Brightness | Extra Large LED Numbers

- **Relay Lights & Audible Alarm Function**
- Completely Thermoplastic | Corrosion-Free
- **NEMA 4X Enclosure**









### LevelPro® TVU Series Universal Process Displays

#### The TVU Series Process Display isn't just rugged and reliable — it's a giant in the world of (multi)color displays.

#### TVU Series — Universal Process Display

The TVU Series Multi-Color LED Level Process Display and Controller is among the industry's most rugged and reliable wall-mount remote level displays.

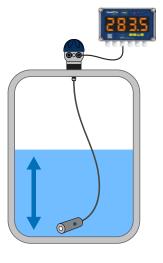
LevelPro® TVU Series comes as a complete all-in-one unit that's ready to use right out of the box. Included is a vivid SunBright® LED Display with adjustable color and brightness, NEMA 4X enclosure, polycarbonate faceplate, a full set of SimplConnect® cord grips and corrosion-free plastic captive screws.

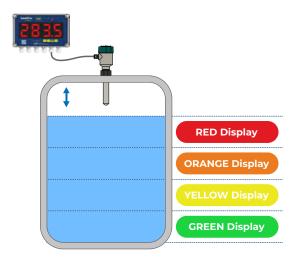
The industrial design of the TVU Series ensures that it will withstand the industry's most corrosive environments while remaining highly visible and easy to read.

Available with either 4 relay outputs or 2 relay + 4-20mA output, the TVU Series is great for automating your tank level processes.

#### **Multi-color Display**

- Acts as a Stack Light
- **Colors Mimic Process** Conditions
- Industry's Largest **Multi-Color LED Display**





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# ITC-450 Series

#### **Tank Level Display + Controller**

- Large Bright LED Display
- 2 Relay + 4-20mA Outputs
- **Optional NEMA 4X Enclosure**
- 4 Configurable Relays (5 Amp)
- **Adjustable Display Brightness** Analog Output 4-20mA + 2 Relays
- 4-Digit LED Display
- Sensor Power Supply 24VDC Output
- RS-485 (Modbus RTU)







# Mini B Series Level

#### Chemical Combo Package | 120VAC



- **Level Sensor**
- Display + Visual Alarm

LevelPro

- Junction Box





- ✓ NEMA 4X
- 2" NPT  $\odot$

**LP100** 



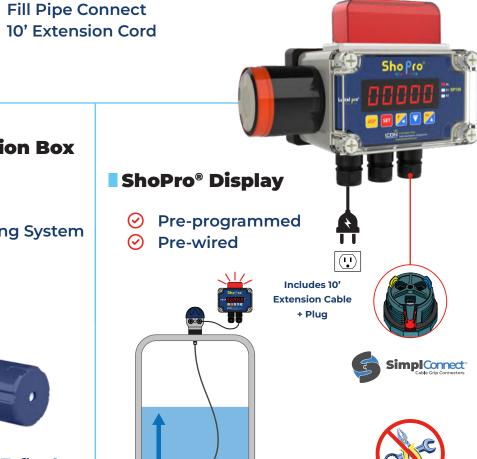
#### 100 Series Sensor

- PVC | PP | PVDF | 316 SS | PTFE Teflon®
- Integral Weight | No Floating
- Teflon® Jacketed Cable
- Kalrez® O-Ring Seal

#### Sentinel®

- **⊘** NEMA 4X
- **Battery Operated**
- **Scheduled Call-Outs**





#### ClamPro® Quick Fit





# **CFL Series Level**

#### **Chemical Combo Telemetry Package**



- **Continuous Level Float**
- Visual Alarm Flashing HI/LO Level
- PVC | PP | PTFE | 316SS





#### **Loop Powered** to Controller

- Pre-programmed
- **Pre-wired**























# LevelPro

# Sentinel Series LT

#### Sentinel® Remote Tank Level Monitoring

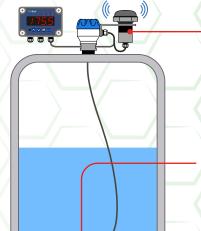


**Battery Operated — No Power Cables** 

(Wired VAC available)

Activate without Opening Lid

- Battery Operated No Programming
- **⊘** Remote Tank Monitoring via Cellular Networks
- **⊘** E-mail/text Reporting Alarms
- 24/7 access to data through Cloud Based Sentinel 247<sup>™</sup> Online
- **Output** Variety of Trigger Points
- Mobile Ready Access
- **⊘** Optional LB50 Mounting Bracket



**Sentinel LTE with Bracket** 

Optional PVC | PP | PVDF | 316 SS Chemical Resistant 100 Series Submersible Level Sensor



Sentinel LTE Powers Sensor No External Power Supply Required

#### **How It Works**

Tank | Sump



**Sentinel** 

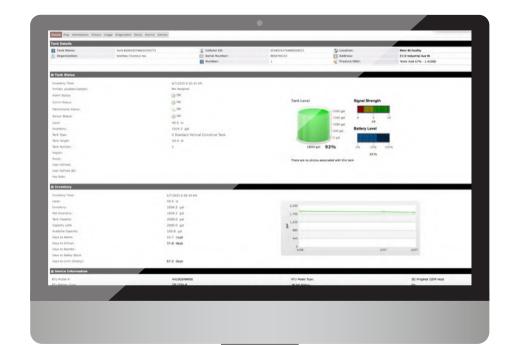


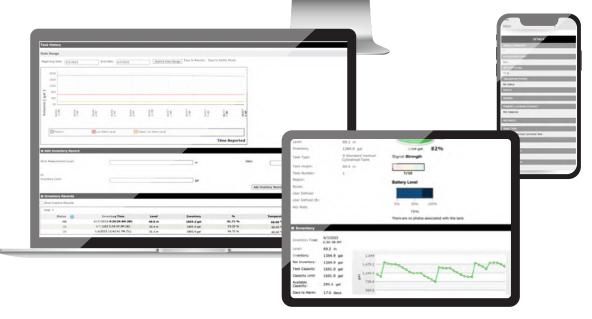




Sentinel 24/7 Online Inventory Manager

# Access Tank Data From Anywhere







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#### **Current Tank Statistics**

#### 

#### **Tank History**



#### ProCon® P14 Series — pH Sensors



roCøn

Direct D400 Controller with SimplCal® Auto Calibration







**TUPA Series Fitting** 



Nexus® Solid Reference

SimplConnect\*

**Blue Glass Electrode** 





3/4" NPT Connection

# ProCon® P14 Series — pH Sensors

#### High performance industrial pH sensor for harsh applications

The ProCon® P14 series offers the ultimate combination of durability, functionality and long-term performance; exactly what is required for industry's most complex applications. The Nexus® reference eliminates reference poisoning. The sensors are available in flat planar or bulb style design.

All measurement functions are combined in one compact body — measuring electrode, temperature sensor and an inner reference chamber. The 2-wire 4-20mA, 4-wire or 4-20mA + RS485 output options simplify calibration and communication with remote displays and controllers..

- 4-20mA Output
- **Temperature Compensated**
- Nexus® Solid KCl Reference
- No Preamp Required
- 3/4" NPT Connection
- PP or PPS Body Materials
- **RS 485 Modbus Communication**

#### ○ PREEMPT THE PREAMP ○



**Integral Preamp** 

2-wire 4-20mA, RS485 direct sensor to controller connection (no preamp)

**Enhanced chip technology** allows for remote calibration as well as diagnostic data

**Digital output** — longer distances without compromising accuracy.

#### Nexus® technology

- Solid KCI infused reference junction
- Eliminates reference poisoning/leaching
- Extended life expectancy



#### 7 Distinct Sensors Designed for the Toughest pH Environments

**Ultra-pure H2O** 

General

Complex

HF < 1000ppm

HF > 1000ppm

Seawater

Desulfurization











**P14F** 



**P14S** 



**P14D** 



**Junction Box** 

M12 Quick

Connection

ProCen

roCon

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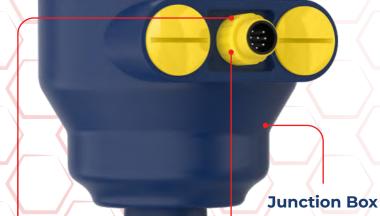
# **R7** Series

#### ProCon® R7 Series — ORP Sensors



Direct D400 Controller with SimplCal® Auto Calibration





roCon









Platinum Electrode R7G

**Gold Electrode** R7C



3/4" NPT Connection

M12 Quick Connection

ProCen

# ProCon® R7 Series — ORP Sensors

#### The gold standard of high performance industrial ORP sensors for general or complex applications

The ProCon® R7 Nexus® series has been engineered for ruggedness, longevity and accuracy and features a platinum or gold electrode for enhanced accuracy.

All measurement functions are combined in one compact body — measuring electrode, temperature sensor and an inner reference chamber. The 2-wire 4-20mA, 4-wire or 4-20mA + RS485 output options simplify calibration and communication with remote displays and controllers..

4-20mA Output

- **Temperature Compensated**
- Nexus® Solid KCl Reference
- **Quick Response Time**
- 3/4" NPT Connection
- **PP or PPS Body Materials**
- **RS 485 Modbus Communication**
- No Preamp Required
- **High Accuracy**

#### ○ PREEMPT THE PREAMP ○



**Integral Preamp** 

2-wire 4-20mA, RS485 direct sensor to controller

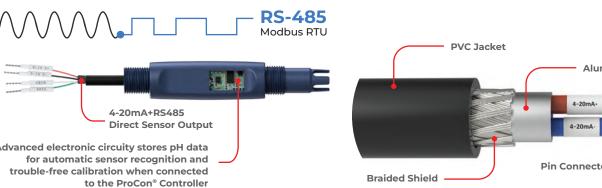
connection (no preamp)

**Enhanced chip technology** allows for remote calibration as well as diagnostic data

**Digital output** — longer distances without compromising accuracy.

#### Nexus® technology

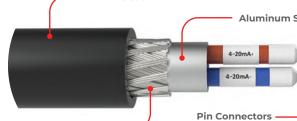
- Solid KCI infused reference junction
- Eliminates reference poisoning/leaching
- Extended life expectancy















# C Series

#### ProCon® C Series — Conductivity | TDS | Salinity | Resistivity Sensors



Direct D400 Controller with SimplCal® Auto Calibration



SimplConnect<sup>\*\*</sup>

Junction Box

3/4" NPT

Connection

**TUPA Series Fitting** 

### **Cancel the Conductivity Module**



Corrosion-Free Instrumentation Equipment



•roCen°



M12 Quick

Connection

## ProCon® C Series — Conductivity | TDS | Salinity | Resistivity Sensors

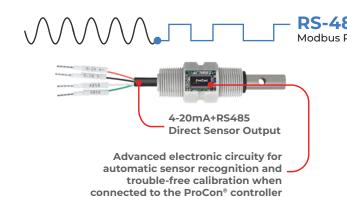
#### Tough but sensitive — High performance, industrial strength sensors for harsh applications from 0µS - 2,000mS

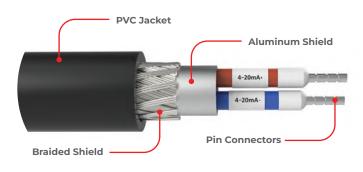
Measuring specific conductivity of aqueous solutions is becoming increasingly important for determining impurities in water. The ProCon® C series conductivity sensors have been proven to operate seamlessly in industrial process applications.

The ProCon® line of analytical sensors have been designed for difficult industrial applications and to outperform even in extreme conditions.

The 2-wire 4-20mA, 4-wire or 4-20mA + RS485 output options simplify calibration and communication with remote displays and controllers.

- Conductivity | TDS | Salinity | Resistivity
- Range 0µS 2,000mS
- No Costly Conductivity Module Required
- Direct 4-20mA & RS485 Outputs
- 3/4" NPT Connection
- **Factory Calibrated**





#### 9 Distinct Sensors Designed to Outperform





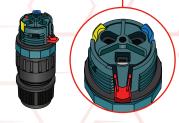
# Controllers

#### pH | ORP | Conductivity | TDS | Resistivity | Salinity Controllers











- Large Color LCD Display
- SimplCal<sup>®</sup> Calibration
- Three Relay Control Switches
- **Password Protection**
- Data Recording | Curve Display | Data Upload Function
- Manual and Automatic Temperature Compensation
- High & Low Alarm and Hysteresis Control
- 4-20mA & RS48 Output Modes



IP66 NEMA 4X **Polycarbonate Enclosure** 

**Color Dual Display** 

**Economy** 



Color LED





Single

**Data Trending** 









Dual

NEMA 4X



Universal

5-Channel



# pH | ORP | Conductivity | TDS | Resistivity | Salinity Controllers

#### **High Performance Industrial Digital Analyzer Controllers**

The ProCon® series of industrial controllers feature a modular design that's both easy to install and operate providing first measurement values in under one minute.

ProCon® controllers are packed with all the extra features included. No need to pay extra for relay, 4-20mA or RS485 outputs. The SimplCal® feature makes calibrating your sensor easier and quicker than ever before.

The cost-saving quick and simple setup is done through our user-friendly step-by step on-screen menu.

Active display of red alarm LED provides notification of out-of-bounds sensor readings and indication for sensor cleaning/recalibration or replacement.

#### **U900 Universal Industrial Analytical Controller**



- Data Recording | Curve Display | Data Upload Function
- Multiple Automatic SimplCal® Calibration
- **Manual and Automatic Temperature Compensation**
- Three Relay Control Switches
- High & Low Alarm
- 4-20mA & RS485 Multiple Output Modes
- Password protection



#### **The Ultimate High Performance Universal Industrial Analytical Controller**

This controller offers brilliant display quality and high power visualization. The touchscreen is both easy to navigate as well as being user friendly.

The price-performance ratio of being able to monitor five distinct sensors at the same time makes it an excellent investment.

The U900 can be integrated into a network, and also meet the ever-increasing demands for transparency and data provision.





pH · ORP · Conductivity · TDS · Resistivity · Salinity Dissolved Oxygen • Level • Turbidity • Free Chlorine NO3 · Temperature · Chemical Oxygen Demand

D300/C300 D400/C400 D500/C500 D520/C520

Dual

**Data Trending** 

D700/C700

Single

NEMA 4X

D720/C720

U900

Д

#### **Pressure Sensors**

#### The OBS Series is the industry's only integral molded one-piece plastic pressure gauge and gauge guard.

Gauge guards are utilized to protect the pressure gauge from any corrosive media in the process system. The OBS Series Chemical Pressure Gauges are truly unique and industry leading when it comes to pressure measurement in corrosive environments.

OBS Pressure Gauges are a one-piece design and come factory pre-filled, resulting in industry leading accuracy. They save time and effort, eliminating the need for filling. The 3 movable red, yellow and green range tabs are designed to act as a visual pressure alert for bag or filter change-outs. No Filling or Assembly Required - One Piece Design Excellent Chemical Resistance ✓ Teflon® or FPM Diaphragm Large 2 ½" Display √ ½" MNPT | FNPT | Flange | Socket **Factory Pre-Filled Range Markers Atmospheric Pressure Compensator** 









The TruFlo® PPT pressure transmitters/switches are rugged, accurate and reliable.



Green Within Parameters

#### The TruFlo® PPT is available with a junction box for an extra measure of durability

The Truflo® PPT Series is the industry's most accurate and reliable pressure transmitter and switch. This transmitter is truly unique when it comes to pressure measurement in corrosive environments.

The PPT Pressure Transmitters are a one-piece design and come equipped with a bright LED display that will change from green to red in any upset condition. The PPT pressure transmitter is equipped with a 4-20mA output + 2 Relays (NPN or PNP). This feature is great for pump protection to prevent pumps from running dry.

The PPT Series is available in PP, PVDF & 316SS and are equipped with either a ceramic or stainless steel sensing diaphragm. The NEMA 4X enclosure and polycarbonate faceplate give the PPT a rugged, industrial design that allows it to stand up to the industry's most corrosive environments.

#### PPT Digital LED Pressure Transmitter | Switch

- **⊘** High Accuracy | ± 0.25%
- **⊘** 330° Rotating Head | Tri-Display
- LED Changes from Green to Red in Upset Condition
- 4-20mA + 2 Relay Outputs
- PP | PVDF | 316 SS
- IP66 | NEMA 4X
- Psi | Bar | kPa | Kg/cm2











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#### *truflo*® **PRD Series**

#### **Digital LED Pressure Transmitter | Switch**

- High Accuracy
- **LED Display**
- Small Footprint | Perfect for **OEM Skid Systems**
- Alarm Outputs



- Miniature Size
- 4-20mA + 2 Relay Outputs
- LED Display | Visible in the Dark
- Psi | Bar | kPa | Kg/cm2 | in/wc

#### Protect your equipment

The Truflo® PRD Series is an excellent choice, providing high accuracy and reliability. The PRD Series is truly unique when it comes to pressure measurement in corrosive environments.

The Truflo® PRD pressure transmitters are the perfect solution for OEM skid manufacturers because of their compact design.

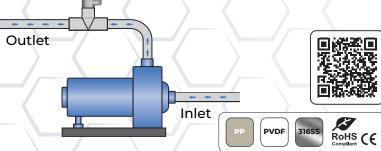
PRD pressure transmitters are available in PP, PVDF & 316 SS and come equipped with a bright LED display that will change from green to red in any upset condition.

The PRD has a 4-20mA output + two (2) 1 amp, NPN or PNP relays.

#### Example

- Prevent Pumps from Running Dry
- Notification for Filter | Strainer Change-Out
- Output to Alarm | Shut Off Pump



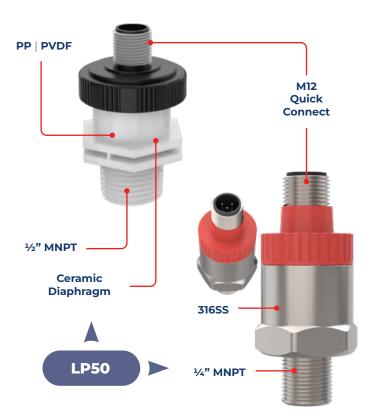






# LP Series

#### **In-Line Pressure Transmitter | Switch**



#### **Features**

- 0 60 | 0 100 | 0-160 Psi
- 4-20mA Output | 2 Wire Loop Powered
- NPT Connection
- Ceramic Sensing Diaphragm
- Easy Installation
- 0.25% F.S. | High Accuracy
- No Programming Required
- **Temperature Compensated**
- **Excellent Chemical Resistance**

The **LP Series Pressure Transmitters** are designed to measure pressure or level within industry's most demanding corrosive process applications. When measuring pressure, they can be mounted vertically or horizontally, and can easily be installed into a threaded process pipe tee fitting.

The LP Series implements a state of the art ceramic measuring principle that changes the physical pressure (which equates to no more than a few microns), into a linear electronic signal that can be measured. This minimal deformation applies durability. It's perfect for tough industrial applications.

**PVDF** 

**316SS** 



**Optional UMD-4 Local Display** 

**2** 

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# truflo

# **BRP Series**

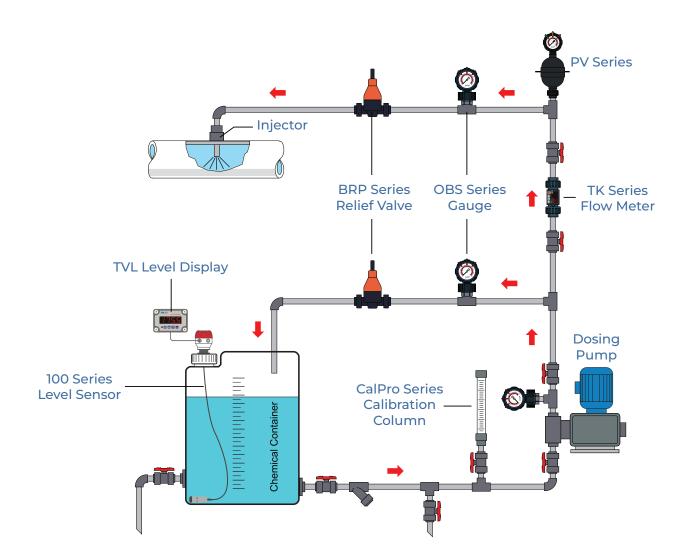




- **⊘** PTFE Teflon® / EPDM Bonded Diaphragm
- **⊘** Glass Filled PP Bonnet
- **⊘** Field Adjustable 5-150 Psi Range
- **⊘** True Union Design
- Socket or NPT Connections
- **⊘** Small Footprint
- Unaffected by Downstream Pressure

The TruFlo® BRP Series Back Pressure Relief Valve has two functions. As a back pressure valve installed in-line downstream of a pump. In this position the back pressure below the metering pump is maintained.

When the BRP valve is installed in the branch of a tee fitting it functions as a pressure relief valve. The valve remains closed until inlet pressure reaches the preset pressure which is adjusted by turning the spring tensioning bolt. The pressure at the inlet of the valve acts upward against the piston allowing the liquid under higher pressure to flow upwards through the orifice.



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#### PulsePro® | PulsePro® PV | PulsePro® PF Pulsation Dampeners

- **⊘** Reduce Damaging Effects of Water Hammer
- **Output** Reduces Vibration / Protects Valves / Sensors / Instruments
- **⊘** Easy to Install In-Line Design
- Provides Constant Output required for Flow Meters and Pressure Gauges



Engineered for accuracy, ruggedness and longevity



✓ All Plastic design GFPP / CFPVDF / PTFE

- No Pre-Charging Required
- Lightweight with a Small Footprint
- **Overage Series** Corrosion Resistant Inside and Outside
- Long Lasting Heavy Duty Diaphragm
- Self-Adapting Technology Constantly reacting to hydraulic demands
- ♥ Up to 90%+ Reduction in Pressure Spikes
- Easy to Size
- **⊘** Suitable for Viscous Liquids

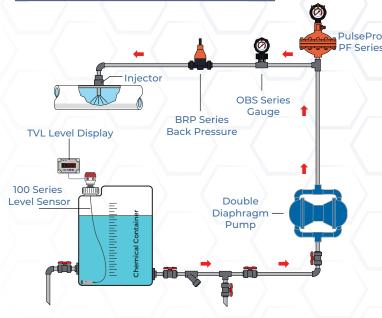
The new PulsePro® Series Surge Suppressor | Pulsation Dampeners are built tough and designed to operate flawlessly in the most demanding of industrial environments.

PulsePro® offers a new air feed/bleed technology that is self adaptive to the ever changing environment found within a pressurized piping system.

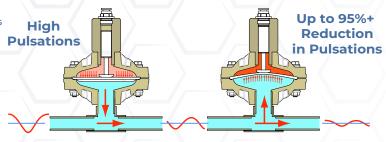
The PulsePro® is designed to minimize the harmful hydraulic shocks caused by volumetric air diaphragm pumps, water hammer, metering/dosing pumps.

The PulsePro® is maintenance free and the active diaphragm-plunger requires no preloading or tuning — the PulsePro responds immediately to dampen any shocks or hammer that may suddenly occur.

#### **Typical System Schematic**



#### **Pulse | Surge Compressor**









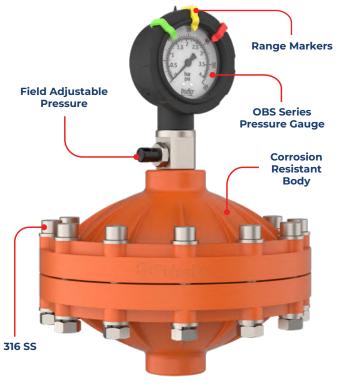








#### PulsePro® PF



- **⊘** Easy to Install
- **⊘** Lightweight Design | Small Footprint
- **⊘** PTFE Teflon® Diaphragm
- **Output** Suitable for Viscous Liquids
- **⊘** Up to 95%+ Reduction in Pressure Spikes
- **⊘** Corrosion Resistant Bodies GFPP | PVDF
- √ ½" 2" Sizes

#### **Equipment protection that can handle the pressure**

The PulsePro® PF Series pulsation dampeners are designed to provide protection for process instrumentation, eliminate vibration and provide smooth continuous flow.

Truflo PulsePro® PF Pulsation Dampeners are chargeable and can be adjusted to best suit the process requirements. The PV series can eliminate up to 95% of the pulse caused by positive displacement pumps.

The PulsePro® PF Series pulsation dampeners consist of a flexible PTFE diaphragm and an upper and lower chamber. The upper chamber is pressurized with air or nitrogen.

The PulsePro® PF Series operate on the principle that the volume of air in the upper chamber is inversely proportional to the kinetic pressure of the fluid being pumped.

#### PulsePro® PV

- Lightweight Design | Small Footprint
- Suitable for Viscous Liquids
- √ ½" 2" Sizes

#### **Equipment protection that can handle the pressure**

The PulsePro® PV Series pulsation dampeners are designed to provide protection for process instrumentation, eliminate vibration and provide smooth continuous flow.

Truflo PulsePro® PV Pulsation Dampeners are chargeable and can be adjusted to best suit the process requirements. The PV series can eliminate up to 95% of the pulse caused by positive displacement pumps.

The PulsePro® PV Series pulsation dampeners consist of a flexible PTFE diaphragm and an upper and lower chamber. The upper chamber is pressurized with air or nitrogen.

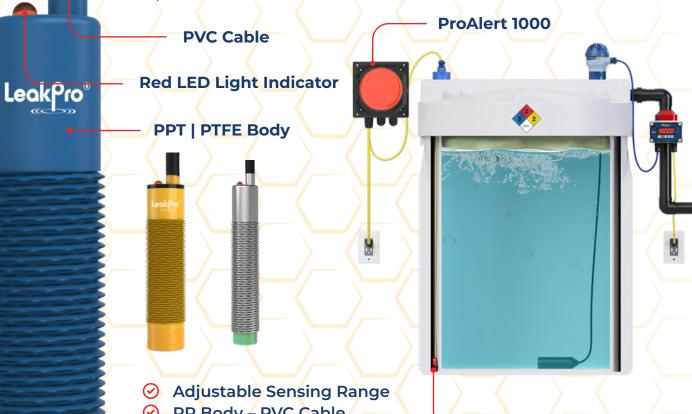




# **LDS Series**

#### **Leak Detection Capacitance Sensor**

LevelPro® LDS-YN Industrial Series is an advanced all plastic corrosion resistant leak detection sensor that utilizes ultra-sensitive electrostatic technology which constantly and accurately senses the presence of liquids. These sensors are ideally suited for monitoring the interstitial area between double wall tanks, tank retention dikes, secondary containment sumps, and are where process pumps and valves are utilized. The LDS Series sensor has been engineered to withstand even the most extreme conditions while including features designed to optimize performance and reduce maintenance.



- PP Body PVC Cable
- Green LED "ON"
- Red LED "Alarm"
- NPN / PNP Relay Output
- Perfect for Interstitial Leak Detection
- ( NEMA 4X



LFS — All Plastic Flange Spray Shield







LDS-YN



# LeakDtec® LDP2

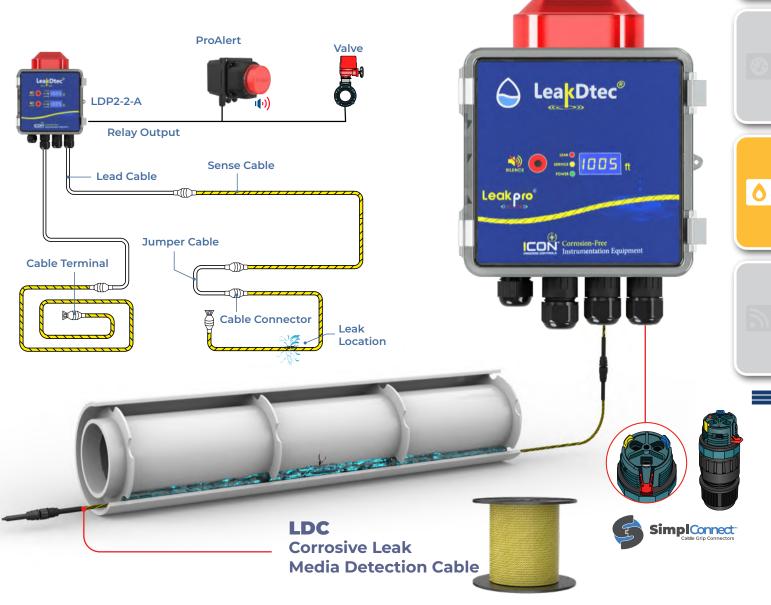
#### **Leak Detection Monitor**

The LeakDtec® LDP2 Series liquid alarm module has been designed to provide our customers with a product that offers accurate detection and identification of the location of where the leak has occurred.

The sensitivity adjustment provides fine tuning to the signal coming from the sensor cable.

The LeakDtec® LDP2 monitor offers dedicated RS485 communication output signals ensuring the sensing cable is always being monitored.

- LDP2 monitors up to 4 separate LeakDtec® cable strings
- 7500' Cable Sensing Range
- **3 Amp Relay Output**
- **Sensitivity Adjustment**
- **NEMA 4X Enclosure**
- **RS485 Modbus Communication**
- Locates leaks within ±3ft of source
- Remote Monitoring to PLC
- **Rapid Indication of Leak Location**



# LevelPro

# **NC Series**

#### Liquid Level | Leak Detection | Switches



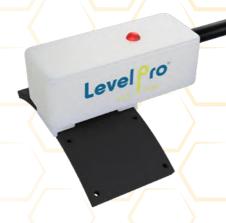
#### NC 15 | NC 25

- **⊘** Non-Intrusive
- All Plastic Design
- High Accuracy
- **Sensitivity Adjustment**
- Perfect for Dosing or Metering Photoelectric or Capacitive Technology LED Light - Visual Indication of Presence of Liquid

#### NC 30

- Non-intrusive Liquid Level Detection through Plastic or Fiberglass Walls
- Simple Relay Setting
- ✓ M12 Quick Connect/Disconnect
- ✓ Measure up to 2" Pipe Diameter (Sch 80)
- Senses up to 0.3" | 8mm Wall Thickness





#### NC 30Y

- Capacitive Sensing | No Moving Parts
- **⊘** Perfect for Aggressive | Conductive Liquids
- ✓ All Plastic Design | Excellent Chemical Resistance
- LED Display Status

# truflo<sup>®</sup>

# Lotorq LT Series

#### EPDM | Teflon® Flange Gaskets

- **⊘** Bolt Torque Reduced by Up to 75%
- O Double Raised O-Ring Design
- Perfect for Plastic Piping Systems
- Excellent Chemical Resistance







# LeakPro® LDC | LDS-R

#### **Leak Detection Cable**



#### LDC — Corrosive Leak Media Detection Cable

- **⊘** Four (4) Core Distance Detect
- Polyethylene Jacketed
- High Tensile Pull Strength
- Compatible with LDP Module

#### LDS-R — Leak Detection Cable

- **⊘** Capacitive Fail-Safe Operation
- Perfect for Aggressive and Electrically Conductive Corrosive Chemicals
- Containment Dikes | Double Wall Tanks



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# MCC-16

#### **Universal Multi-channel Controller**







**NEMA 4X Enclosure** 



**Visual Alarm** 





Wireless



#### Simultaneous Multi-Channel Functionality (x16)

Flow • Pressure • Level • pH • ORP • Conductivity • TDS Resistivity • Salinity • Dissolved Oxygen • Turbidity Free Chlorine • NO3 • Temperature





# **Multi-Channel Controller**

#### The Ultimate High Performance Wireless Telemetry Controller

This controller offers brilliant display quality and high power visualization. The touchscreen is both easy to navigate as well as being user friendly.

The price-performance ratio and versatility of being able to monitor eight distinct sensors at the same time makes it an excellent investment.

The MCC-16 can be integrated into higher-level networks, to meet the ever-increasing demands for transparency and data provision.

#### MCC-16 Wireless Universal Industrial Controller

- **⊘** Up to sixteen (16) Discrete Channel Inputs
- Data recording / curve display / data upload function
- 4-20mA & RS485 multiple output modes
- **Local or Cloud Based**
- $\odot$ WiFi
- $\odot$ Cellular
- 7" Color Touch Screen
- **Bright Visual Alarm**
- Password protection

#### **M12 Connections**





#### **How It Works**









**Tower** 





User

2

Sensor

Display

**Connected Devices** 

# **LRT Series**



#### **LoRa** — Long Range Wireless Transmitter



- LoRa wireless provides a stable data stream
- distance of 10mi+ (16km) line of site or 2mi+ (3km) industrial environment
- Multi-interface support RS-485 / 4-20mA or digital input / digital output
- Programmable data transfer intervals
- Monitor up to 5 sensors with one gateway
- Robust outdoor construction (IP68, NEMA 4X)
- Analog input (4-20mA)
- Modbus command for Analog Input / Digital Input / **Digital Output / DC Output**
- **⊘** Digital output support PWM / Latch Mode
- AUX I/O support remote setup / status inquiry function

### Save Time, Money and Resources by Monitoring Remotely

LoRa is a **Low-Power** and **Long-Range** transmission protocol with anti-interference performance.

4 – 20mA or RS-485 MODBUS RTU's industrial interfaces are available that allow for connection to existing industrial control host (ex. PLC).

Experience easy setup and installation, and anytime, anywhere operation and monitoring with IZON Wireless

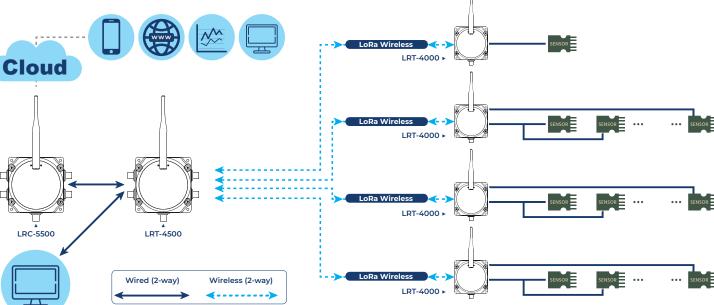
Keep your eyes on everything remotely.

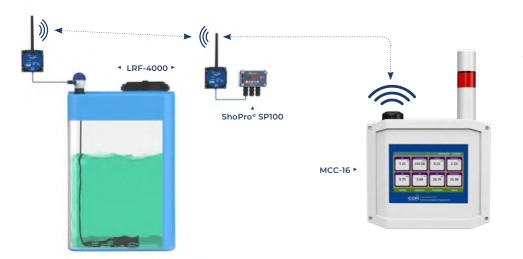
#### **IZON LRT-4500 LoRa Gateway** (5 channel)



# Cloud LRC-5500 Wired (2-way)

LoRa Wireless Internet / Intranet





# Wire you still running expensive cable?













# LRC Series



#### **NB-lot** — Long Range Cellular Transmitter



**IZON LRC-6500 NB-IoT Gateway** (5 channel)



(5 channel)

**LRC-6500 Wireless Gateway** 

- Wide voltage operation for industrial applications
- Multi-interface support RS-485 / 4-20mA or digital input / digital output
- Programmable data transfer intervals
- Robust outdoor construction (IP68, NEMA 4X)
- Analog input (4-20mA)
- Digital output support PWM / Latch Mode
- Redundant battery inside. (LRC-6500B)

#### **LRC-5500 Wireless Sensor Node**

- Operating Bands: Band 1 / Band 3 / Band 5 / Band 8 / Band 20 / Band 28
- Internet Protocol TCP / UDP / MQTT / MQTTS / Line Notify
- 4 Sensors-Interface Support Analog or Digital Input / Analog or Digital Output / RTD / Frequency Count / **Pulse Count**
- Multi-type Interface for Sensor
- Data Logger With SD Card
- **⊙** GNSS / GPS Receiver
- More Energy Efficient / Longer Standby Time
- Solar Charger Management
- **Redundant Battery Inside**
- Wide Voltage Operation for Industrial Applications
- Robust Outdoor Construction (IP68, NEMA 4X)

#### IZON Sensor Node series for remote or mobile monitoring / data collection and control.

The LRC Series can be connected to analog sensors / thermometers / flow meters / level sensors / digital sensors / modbus sensors, and also provides analog / digital control contacts and GPS positioning functions. Additionally, it includes sensor data collection and upload to cloud / server and sensor data logger functions. Secure you data with AES encryption.

# **How It Works** Optional

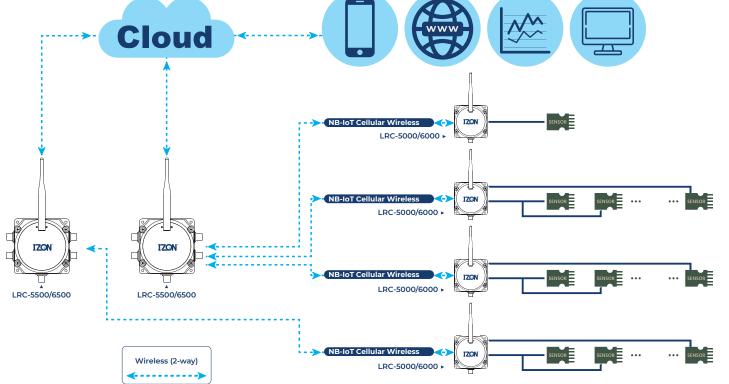
**Gateway Receiver** 

**Connected Devices** 

**Gateway Transmitter** 

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# **IZON**° S-10000B | S-25000B

#### **LG Solar Lithium-Ion Battery Pack**



# Power up under the sun with our Solar Battery Pack!

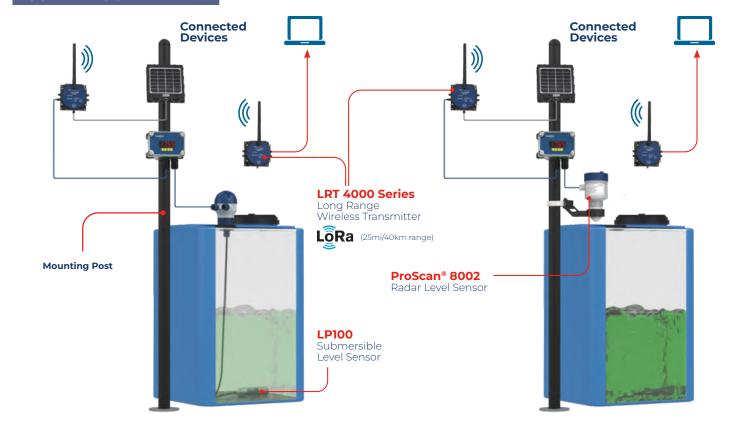
Never run out of power again with our S-10000B/S-25000B industrial series solar-powered battery power bank. Harness the sun's energy to keep your devices charged and enjoy the freedom of sustainable energy wherever your tanks are located.







#### **Typical Applications**



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#### Use it anywhere you need DC power outdoors



# ProAlert® 2 Series

#### Industrial Visual | Audible Sentry Alarm



**All Plastic** 

**NEMA 4X Enclosure** 











#### **Built** in **Visual Alarm**



SimplConnect<sup>®</sup>











#### **Features**

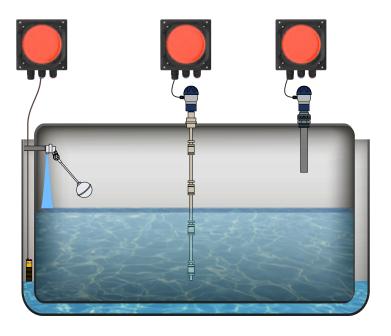
- **⊘** High Intensity Red Alarm Light
- Pulse to Relay Output
- Super Loud 108dB Audible Alarm
- Silence Function | Light Remains On
- **Rugged NEMA 4X Industrial Enclosure**
- **External Wall Mounting Brackets**
- High Impact Plastic Polycarbonate Shell
- Includes 6' Power Cord + Watertight Cord
- **Completely Pre-Wired**
- **Extra Output Contact to Remote Alarm or PLC**

#### **Typical Applications**

- Flow | No Flow Sensors | Pump Protection
- Bag | Filter Change Out
- **Leak Detection**
- **Upset Condition Notification**

#### Specifications

- **⊘** Dimensions | 7" X 5" X 4.5"
- Enclosure | NEMA 4X
- Weight | 2.1 lbs.
- 24VDC  $\odot$
- 100 240VAC (with DC adapter)



NOTE: The ProAlert® PA223 can be used in more than just leak detection applications. It is an excellent high/low level alarm or any other upset condition.

#### **3 Easy Mounting Options**

**Wall Mount** 





**Pole/Pipe Mount Panel Mount** 

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**Available** 

**NEMA 4X** 

**Enclosure** 

# 650 | 4000 | 7200 | 8000

#### **Universal Data Loggers | Displays | Controllers**

#### ITC-650 Data Logger

- Universal Multi-channel Indicator
- Up to 8 inputs Universal 4-20 mA
- 2 Electronic Relay Outputs
- **24VDC Power Supply**
- Output: 24V DC / 200 mA
- Temperature, Flow, Humidity, Pressure, PH, Redox, Level, Current
- **Password Protected**



The LevelPro ITC 650 Universal Data Logger can display current and record values from 8 different measuring channels. Each channel can be individually designated (described) with any engineering measuring unit. The LCD graphical display allows for visualization of the values from all 8 channels simultaneously. A significant advantage is possibility of viewing the trends in each measuring channel.



#### ITC 4000 Data Logger + Display + Controller

- Openion of Relay Outputs
- Analog Output 4-20mA + 2 Relays
- **4 Universal Inputs**
- **NEMA 4X Enclosure** Cable Grips Included

#### ITC-7200 Series

- **Universal Multi-channel Indicator**
- Up to 48 inputs. Universal 4-20 mA
- Temperature, Flow, Humidity, Pressure, PH, Redox, Level, Current
- Viewing the Trends in each of the **Measuring Channels**
- **Password Protected**







#### ITC 8000 Series

- Universal Multi-channel Indicator
- Up to 72 inputs. Universal 4-20 mA
- Temperature, Flow, Humidity, Pressure, PH, Redox, Level, Current
- Trending | Mapping in each of the Measuring Channels
- Color LCD Touchscreen (also compatible with traditional keyboard and a USB mouse)
- NEMA 4X | IP65 Front Panel Protection
- **Password Protected**
- Up to 15GB Data Storage

#### **Use Java applets**

It is possible to create your own website or use one of the templates included in the ITC series.

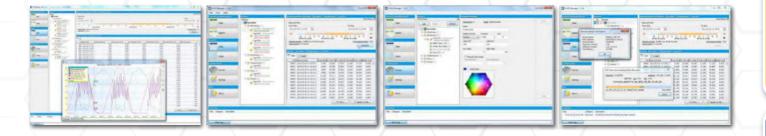
Applications such as tank level with bar graphs, flow meters indicating flow speed or total liquid flow, a pressure gauge indicating process pressure — all are possible with the ITC series This solution makes monitoring of the entire system much more transparent and simple to use.



#### **DAQ Manager**

To manage large amounts of data we have designed a software package that is free of charge. The software converts the data into easy viewing graphs and tables, and can provide group measurement results, create reports and export data into other files. Its fully functional free version can be downloaded from our website.

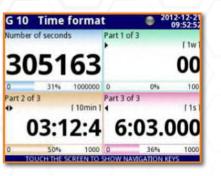
#### Measure | Recalculate | Control and Display



Calculate the data according to your own requirements; one result can be used as an argument of another action. An example, current measurement from 8 channels and voltage from 8 channels cross checked against the total power from 8 items being measured. All data can be visualized in a range of ways: as numerical values, quasi-analog indicators, phasor charts, horizontal or vertical charts, horizontal or vertical bars.







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# Order from: C A Briggs Company

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Sales@cabriggs.com - www.cabriggs.com



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