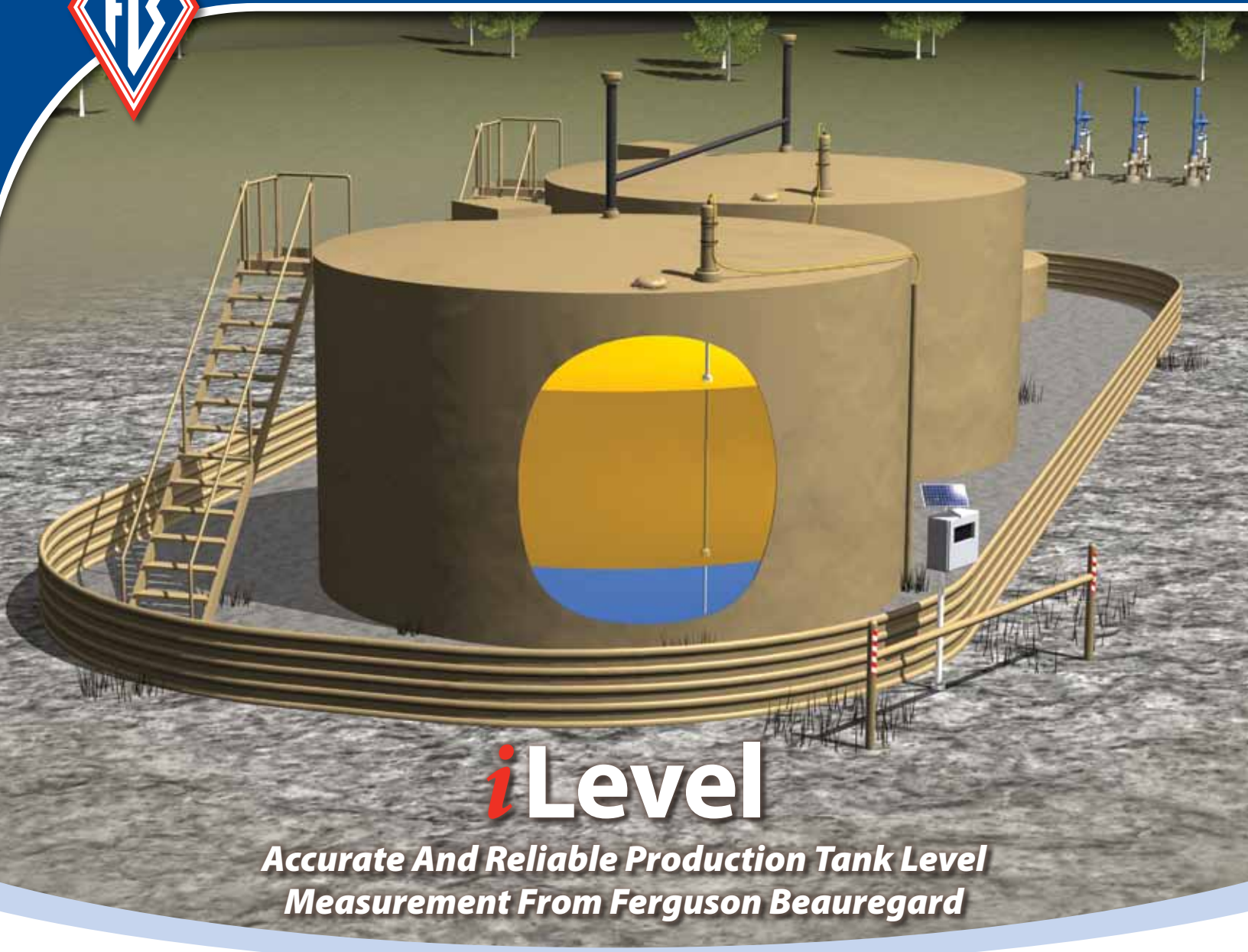

*i*Level

Accurate And Reliable Production Tank Level Measurement From Ferguson Beauregard

Why *i*Level?

Designed For The Oil And Gas Production Environment Including Large Tank Batteries

The *i*Level features a level sensor certified for Class I Div I tank environments when used with the solar powered *i*Level multi-tank controller mounted in Class I Div II area. The *i*Level probe can continuously measure two levels (e.g. oil and water) in each tank. An *i*Level system can be expanded to handle 24 tanks on a single easy-to-configure controller interface providing a very economical solution for large tank batteries.

Durable / Reliable Field-Proven Design

The *i*Level is based on proven, magnetostrictive probe technology design by our sister company OPW, the global leader in fueling equipment since 1892. Today, OPW's innovative tank gauges, probe, and sensor technologies are specified around the world for their highly accurate and reliable measurement, monitoring, and in-tank leak detection of liquid fuels. From the *i*Level probe's stainless steel construction that makes it highly resistant to corrosion to its unique one-piece welded head design that eliminates potential leak points, the probe is designed for fuel applications where long life reliability is required.

Improved Safety / Low Maintenance

Most important, the power system design delivers improved safety for your operating personnel. With the solar panel and rechargeable battery located at the controller, you never have to go on top of tanks to change batteries in the probes.

Extremely Accurate Level Measurement

The five-point temperature sensing element provides exact compensation for product volume contraction and expansion, allowing for accurate measurement as temperatures vary. The temperature compensation coupled with *i*Level's precision magnetostrictive probe design delivers overall system accuracy, typically better than .05" in production tanks. This is a higher level of accuracy than an operator can determine using a stick gauge in the tank.

Easy To Interface To Most RTUs And Can Connect Directly To SCADA Systems

The *i*Level controller can communicate via a serial connection, wirelessly through a 900 MHz or 2.4 GHz radio or serially via a cell modem – providing several easy ways to retrieve your tank level data without the safety exposure of having operating personnel climbing on top of tanks to gauge the levels. And the *i*Level supports the MODBUS protocol. This results in an interface that does not require a custom communication driver. The *i*Level will interface to most RTUs and can connect directly to SCADA host systems.

Unmatched Field Support To Keep Your Measurement System Working

Most competitors rely on distributors and system integrators to provide you the service you need. FB has field offices located in major production areas across North America so you get responsive, production-knowledgable help directly from FB. We provide our customers with Better Products, Better People, and Better Performance.

General Specifications	
Memory	• 512K application code size • 512k random access memory • 1 micro-SD (2GB Max) card slot memory expansion
Operating Temperature Range	• -40C to + 60C, -20C to + 60C for LCD display
Hazardous Rating	• Class 1, Div 2, with Intrinsic Safety (IS) Barrier for the tank probes
Power Characteristics	
Power supply	• 10W or 20W 12 Volt DC selectable power source • Single or dual 12 volt battery option
Solar Charger Input	• 12 Volt, 20 Watt Max
Quiescent Mode Current	• Approximately 8 milliamps (during Sleep Cycle)
Keypad/LCD active	• Approximately 8 milliamps until next sleep cycle
I/O	
• Built-in 4x20 character LCD and Keypad • Support for 12 probes, expandable to 24 with 2nd barrier	
Communications	
• 1 serial port RS-232 connection • 1 TTL 3.3V serial connection for use with optional short haul radio • USB Local Operator Interface (LOI) for local configuration using a laptop with iConnect software • Supports MODBUS protocol	
Mechanical	
Enclosure Description	• Fiberglass Enclosure, Lockable, Weatherproof
Enclosure Dimensions	• 17.75"Wide X 19.5"High X 9"Deep.
Probe Specifications	
Description	• Probe Type: Magnetostrictive • Float Type: Stainless Steel (or Nitrophyl on request) • Material: Stainless Steel body • Temperature: 5 RTDs
Location	• Hazardous, Class 1, Division 1
Current Draw	• 20 milliamps
Sample Rate	• Measurements taken once every 15 mins.
Lengths Available	• 36" – 238" (3' – 19' 10")
Operating Temperature Range	• --40º F to 140º F (-40C to + 60C)
Probe Precision/Accuracy	
• Measures product level changes to a resolution of 0.0005" (0.0127 mm) • Measures water level changes to a resolution of 0.01" (0.254 mm) • Linearity over the entire probe length is ± 0.04" (1 mm) • Measures product temperature changes to a resolution of 0.001º F (0.0005º C)	

For more information, contact your local field technician, or call our main office: **1-800-282-0039**

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