FUEL MANAGEMENT SYSTEMS
Tank Gauges • Sensors • Probes
Forecourt Controllers • Management Systems

Leading The Way in Fluid Handling Solutions Worldwide
www.opwglobal.com
Overview

Easy and Reliable Tank Gauging & Site Control

OPW offers reliable and accurate tank gauging systems, providing you with the perfect solution for both larger and smaller stations. Our full range of probes and sensors gives you the options you need for successful monitoring of fuel levels and secondary containment spaces. The patented SiteSentinel® multi-drop technology allows more probes and sensors to be connected to one single line going back to the console, resulting in lower installation cost.

OPW tank gauging interfaces are intuitive, easy to use and require minimal user training. The color touchscreens present information in a way everyone can understand. Remote access to the Nano™ and Integra™ platforms allows for quick access to fuel stock information from any location. Technicians and OPW technical support can upgrade software, backup information and provide remote support from virtually any location. Tank gauging has never been easier or more reliable than today.

NEW PRODUCTS

Centralized Fuel Monitoring & Compliance Management
Aggregates a fuel network’s critical data in the cloud to provide “anytime, anywhere” visibility of fuel levels and compliance tracking to unlimited users.

Centralized, Comprehensive Forecourt Management
Universal forecourt controller simplifies management of retail fuel sites and reduces equipment expenses by interfacing with all facets of forecourt operations.
Real-Time Inventory Data Anywhere You Are

The SiteSentinel® Nano™
OPW’s SiteSentinel® Nano™ tank gauge delivers a user-friendly interface in a compact console. The intuitive touchscreen user interface provides real-time, accurate inventory information through a large color touchscreen. Users can schedule the system to perform leak detection tests and to run reports daily, weekly, monthly and yearly.

Applications
- The console’s small equipment footprint makes it ideal for fueling operations of all sizes
- The gauge accommodates 12 probes and 24 sensors, allows future system upgrade
- Multi-drop technology can reduce installation costs by minimizing the wiring and labor required for a quick installation
- Web-based interface enables remote use and training

Specifications
- Dimensions: 21 cm H x 32.5 cm W x 6 cm D
- Power: 120/240 VAC +/- 10%, 50/60 Hz, 200 W
- Operating Temperature Range: 0°C to 50°C
- Display: 18 cm color LCD touchscreen
- Graphical user interface
- Printer: External USB
- Alarm Notifications: Email, Fax, SMS
- Wide variety of communication ports (RS-232, 485, 422, Ethernet, USB)
- Network Connectivity: DHCP/static addressable Ethernet ports

INTUITIVE
The gauge’s 18 cm color touchscreen provides easy access to inventory, compliance, delivery, warnings and alarms

VERSATILE
With a small equipment footprint and cost-saving multi-drop technology, the Nano meets the needs of any fueling operation

USER-FRIENDLY
The Nano’s user-friendly software offers a calendar view and a “Favorites” list for quick recall of the most-used filters

CONVENIENT
Online access enables off-site training as well as remote troubleshooting, remote monitoring of leak detection, inventory and compliance information
State-of-the-Art Gauging Made Simple

The SiteSentinel® Integra 100™

The SiteSentinel® Integra 100™ is designed to lower installation costs by reducing the number of wires required to connect probes and sensors to the internal I.S. module. All digital devices are automatically detected and configured by using the touchscreen interface, making it one of the easiest ATG systems in the industry to install, configure and use.

Applications

- Capable of monitoring up to 16 probes or 64 sensors or combination thereof, the Integra 100 is the ideal solution for operations that need a full-featured tank gauge.
- A streamlined upgrade process makes the Integra 100 the perfect gauge for sites that have the intention to grow in the near future.
- The industry’s largest touchscreen and user-friendly software ensure a simple operating experience for fuel site employees.

Specifications

- Large touchscreen display
- Automatic Calibration and Reconciliation (ACR)
- Standard Integral 4-channel multi-drop I.S. module
- Internal power supply works between 96-264 VAC, covering all global requirements
- International user-friendly icons follow guidelines in MIL STD - 1472
- Downloadable and Flash upgradeable software for easy updates
- Monitors up to 16 probes and 64 sensors or combination thereof
- Dimensions: 37 cm W x 30 cm H x 10 cm D
- Communication Ports: 1 x Ethernet, 2 x RS-232, 2 x USB, 2 internal USB, 1 x modem (optional)

EASY TO USE

The industry's largest touchscreen promotes ease of use

SIMPLE TO INSTALL

With a variety of communication ports, the Integra 100 fits seamlessly into any site’s operations

ACCESSIBLE

Remote access capabilities allow interaction with the gauge from any location

UPGRADEABLE

With a simple upgrade process to the Integra 500™, the SiteSentinel Integra 100 can grow with your operation
Powerful Tank Gauging for Critical Applications

The SiteSentinel® Integra 500™

The SiteSentinel® Integra 500™ represents the fueling industry’s most powerful tank gauge. With the ability to communicate with a wireless VSmart, an external NEMA 4-Class wiring enclosure that can be mounted on the forecourt, the Integra 500 can monitor more probes and sensors than any gauge on the market, and allows for a drastic reduction in the wiring and labor needed for installation.

Specifications

- Large touchscreen display
- Automatic Calibration and Reconciliation (ACR)
- Optional Integral 4-channel multi-drop I.S. Module
- Optional VSmart provides ability to cater to large sites
- Internal power supply works between 96-264 VAC, covering all global requirements
- International user-friendly icons follow guidelines in MIL STD - 1472
- Dimensions: 37 cm W x 30 cm H x 10 cm D
- Communication Ports: 1 x Ethernet, 1 x RS-485, 2 x RS-232, 2 x USB, 2 internal USB, 1 x modem (optional)

Applications

- Capable of monitoring up to 32 probes and 256 sensors, the Integra 500 is ideal for bulk storage and large fueling sites
- Automatic calibration and reconciliation ensures in-depth and up-to-the-moment fuel monitoring
- Remote access and the industry’s largest touchscreen make the Integra 500’s robust feature set simple to use
- Web-based interface facilitates remote training

POWERSFUL

With ACR functionality, the Integra 500 offers the most full-featured monitoring available today

EXPANDABLE

VSmart compatibility ensures the ability to cater to any size site

SMART

Remote accessibility allows the Integra 500 to streamline your daily workflow

ECONOMICAL

For large sites, the Integra 500’s multi-drop technology can lead to substantial savings compared to competitive alternatives

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**SiteSentinel® Multi-Drop and Remote Accessibility**

Available on the SiteSentinel® Integra 100/500™ and Nano™ tank gauges, OPW’s patented SiteSentinel multi-drop and remote accessibility features offer a number of cost and logistics benefits which cannot be found with any other gauges on the market.

### The Benefits of SiteSentinel Multi-Drop

SiteSentinel Multi-Drop technology enables multiple probes to be run back to the Nano on one wire. This drastically reduces the amount of wire and labor needed when installing the gauge, reducing the costs of installation in both new and pre-existing sites.

- **Slash wiring and labor costs for your Nano-equipped installations (see illustration below)**
- **Decrease site downtime needed for gauge installation or maintenance**
- **Achieve significantly lower site installation costs**

### OPW Mixed Multi-Drop Technology

OPW’s mixed Multi-Drop technology allows probes and sensors to be run on one wire back to a tank gauge. This leads to substantial savings on installation labor and wire costs.

With mixed Multi-Drop, the SiteSentinel® Nano® can hold up to 12 probes or 48 sensors in any combination. Possible combinations are driven by a point system: one probe = three points; one sensor = one point.

Each of the Nano’s four barrier positions can hold a total of 12 points, which can be obtained by 4 probes, or 12 sensors or a combination of probes and sensors.

| 12 sensors | Total: 12 points |
| 4 probes | Total: 12 points |
| 2 probes = 6 points + 6 sensors = 6 points | Total: 12 points |
| 1 probe = 3 points + 3 sensors = 3 points | Total: 12 points |

### Multi-Drop Technology versus Competing Gauges

Multi-drop technology helps eliminate installation wire waste by reducing the need for long runs back to the gauge, which can often account for the usable majority of an entire wire spool.

**Installation Wire Waste with the Nano**

253 m installed | 52 m wasted

**Installation Wire Waste with Competing Gauges**

570 m installed | 192 m wasted

### Remote Accessibility

With the ability to directly interact with the gauge from most web-enabled devices, the Nano provides a number of benefits to any operation’s workflow. From initial employee training to emergency support capabilities, users with remote access can control the gauge as if they were present at your site.

- **Access data and interact with the gauge from anywhere on most devices**
- **Train employees on gauge-related processes from a central off-site location**
- **Streamlined troubleshooting processes allow support professionals to see exactly what’s occurring with your gauge in real time**
- **Software updates and upgrades can be implemented remotely**
- **Remote backup functions ensure users never lose historical inventory or alarm data**
SiteSentinel® iTouch™ AutoReconciliation (AR)

Accurate, Affordable Tank Gauging

The SiteSentinel® iTouch™

The SiteSentinel® iTouch™ with AR makes precision fuel monitoring available to any site operator. With automatic reconciliation functionality, you can monitor your inventory, sales transactions and identify the source of unaccounted fuel losses.

Applications
- Perfect for sites that need automatic reconciliation at a cost-conscious price point
- Ability to connect with up to 16 probes or sensors
- Automatic reconciliation capabilities allow you to account for any unexpected variance in your inventory levels
- SiteConnect software enables remote fuel monitoring systems

Specifications
- Monochrome touchscreen display uses user-friendly icons
- Monitors up to 16 probes and/or sensors that can be connected in any combination
- Three RS-232 serial communication ports
- All probes and sensors are third-party certified to meet and/or exceed regulatory requirements
- Operating Temperature Range: -10°C to 50°C
- Dimensions: 23.5 cm H x 31 cm W x 13 cm D
- Input Power: 100-250 VAC, 50/60 Hz, 0.5 A

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924B Probe

Precision Inventory Management

The 924B Probe

The 924B Magnetostrictive Probe features standard stainless-steel construction, making it the ideal inventory measurement solution for any gasoline, diesel, ethanol or biodiesel application. Available in lengths from 1.2 m to 3.6 m, OPW 924B probes are designed to provide accurate fuel level readings no matter the size of your tanks.

Specifications

- Measures product level changes to a resolution of 0.0127 mm
- Measures product temperature changes to a resolution of 0.1°C
- Measures water level changes to a resolution of 0.254 mm
- Linearity over the entire probe length is ± 1 mm
- Material: Stainless-steel body, nickel-coated brass cap
- Location: Hazardous, Class 1, Division 1, Group D
- Temperature Range: -40°C to +70°C
- Data Cable: 305 m Belden 88760; 152 m max. Belden 88761

Applications

- As a level 1 probe, the 924B is engineered to cater to the specific needs of most tank applications
- Multi-drop capability allows up to four probes to be connected on a single I.S. module (compatible gauges only)
- Optional density floats provide a measure of all changes in product density within a specified API density range
- Streamlined installation process ensures simple installation in both 2-inch and 4-inch riser systems

PRECISE

Capable of measuring product changes to a resolution of 0.0127 mm

RELIABLE

ISO 17025 certification ensures each probe we produce meets strict performance standards

VERSATILE

With numerous length and float kit options available, a configuration exists for nearly any facility’s needs

DURABLE

A rugged stainless-steel design prevents in-tank corrosion or degradation

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7100V AST Flex Probe

Accurate Inventory Measurement for Aboveground Storage Tanks

The 7100V AST Flex Probe

The 7100V Series flexible probe leverages OPW’s magnetostrictive technology to allow greater precision and reliability in measuring Aboveground Storage Tanks (AST) product levels.

Specifications

- Available probe lengths from 5 m to 15 m
- Enclosure Material: PVDF
- Resolution: 0.254 mm Inventory Mode
- Distance to Optional VSmart Module: 300 m Belden 88760; 152 m maximum Belden 88761
- Maximum Tank Capacity: 350,000,000 litres

Applications

- The 7100V AST flex probe was designed to be the industry’s most effective probe for AST applications
- With the ability to connect to gauges from up to 300 meters away, the flex probe is ideal for any size site
- Compatible with all common fuel types, the 7100V can fit seamlessly in nearly any fueling operation

ACCURATE

Precision measurement technology enables the identification of product level changes as low as 0.254 mm

FLEXIBLE

The ability to cater to nearly any site size or fuel type makes the 7100V one of the most flexible probes on the market

EASY INSTALLATION

Combined with an OPW gauge, the 7100V is a near “plug and play” solution

RESPONSIBLE

The presence of a 7100V probe eliminates the need for manual tank sticking on ASTs, enhancing site safety

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**Single Level Sump Sensor**

- Detects liquid in sumps, dispenser pans and other locations where its very presence could indicate a leak has occurred

**Liquid Only Interstitial Sensor**

- Used primarily in the interstitial area of double-wall fiberglass tanks
- Can also be used in sumps and dispenser pans
- Contains a float switch that activates in the presence of liquid

**Fuel/Water Interstitial Sensor**

- Designed for use in the interstitial area of a double-wall tank
- Sensor easily installs and discriminates between fuel and water

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**The Smart Sensor™ for SiteSentinel® Integra™**

Our Smart Sensors™ inform you of their connection status, eliminating concerns over whether or not sensors are connected to the tank gauge console.

**Record it. Replace it.**

Upon initial system installation, the SiteSentinel™ Integra™ console records the serial number, date and time sensors will need to be replaced or changed out.

**Multi-drop. Save money.**

Our Smart Sensor™ technology enables the daisy chaining of sensors during the critical installation period. This eliminates direct wiring runs back to the SiteSentinel™ iSite™ console inside the building, leading to cost savings.

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**Fuel/Water Interstitial Sensor**

- Designed for use in the interstitial area of a double-wall tank
- Sensor easily installs and discriminates between fuel and water
**Fuel/Water Monitoring Well Sensor**
- Used in monitoring wells with fluctuating ground water tables
- Detects and discriminates between hydrocarbon liquid and water

**Dual-Level Interstitial Sensor**
- Designed for use in the brine-filled reservoir of the interstitial area of a fiberglass double-wall tank
- Contains a dual level float switch that detects level changes of fluid in the tank's reservoir

**Hydrocarbon Vapor Sensor**
- Detects hydrocarbon vapors in monitoring wells and the interstitial areas of a double-wall tank

**Fuel Sump Sensor**
- Detects liquid hydrocarbons in STP sumps, dispenser pans and other locations where their very presence could indicate a leak has occurred

**Non-Discriminating Dual Float Sensor**
- Detects liquid in STP sumps, dispenser pans and other locations where their very presence could indicate a leak has occurred
- Contains two float switches giving the ability to give a high alarm and high, high liquid alarm

**Fuel Monitoring Well Sensor**
- Used in monitoring wells with fluctuating ground water tables
- Can be placed in the containment areas of tanks, pumps and pipes
Centralized Fuel Monitoring & Compliance Management

OPW CloudCentral® aggregates your fuel network’s critical data in the cloud to provide “anytime, anywhere” visibility of fuel levels and compliance tracking to unlimited users.

**OPW CloudCentral®**

OPW CloudCentral®, which is compatible with every major brand of tank gauge, is a comprehensive, cloud-based inventory management platform. Featuring environmental compliance management software powered by Titan Cloud Software, as well as powerful fuel level monitoring, analytics, reporting and remote management capabilities, OPW CloudCentral is the most versatile cloud-based fuel management platform on the market today.

**Applications**

- Centralizes fuel and fuel equipment data into one system of record for retail and commercial sites
- Provides real-time fuel level data and reporting management — including variance results — to an unlimited number of users
- Provides actionable data for streamlined environmental compliance management practices

**COMPATIBLE**

CloudCentral’s environmental compliance management software, which is powered by Titan Cloud Software, is compatible with tank gauges from every major ATG manufacturer

**COST-EFFECTIVE**

Software’s unlimited user capacity enables fuel sites to efficiently scale for network expansion, while the platform’s real-time visibility into fuel inventory levels, alarms and equipment issues minimize service calls and site downtime

**DEPENDABLE**

With a 99.9% up-time rate and continuous back-up at a Tier-4 PCI-compliant data center, operators can be confident their inventory data is accessible at all times

**CONVENIENT**

Instant, remote management allows users to act on critical alarms and other site data “anywhere, anytime” from any web-enabled device
OPW CloudCentral® simplifies fuel level monitoring and environmental compliance management to provide an overview of fuel site data that is informative and actionable.

**Fuel Inventory Monitoring & Reporting**
Displays tank inventory levels including fuel volume by tank and product, water volume (for tanks equipped with water float detection probes) and ullage. All volumes are displayed numerically and graphically.

**Inventory Reconciliation & Reporting**
Reconciles dispenser data, in-tank inventories and deliveries to identify variances and provide visibility over potential sources of unaccounted fuel losses.

**Flow Rate Monitoring & Reporting**
Reports average and maximum flow rates for each dispenser at each site and performs In-Station Diagnostics and monitoring.

**Delivery Monitoring & Reporting**
Tracks and displays delivery history including delivery date, tank start date, tank end volume and delivery volume.

**Compliance Tracking**
Aggregates leak detection data to a compliance dashboard where reports can be printed for regulatory requirements. Data includes:
- Tank results by tank test type
- Line leak detection results by line
- Status of sensors not used for tank and line compliance
- Record of inventory reconciliations for regulatory requirements

**Alarm Monitoring & Reporting**
This application ensures you never miss critical fuel site events including leak detection alarms, tank management alarms, unresponsive or malfunctioning hardware alarms and notifications for when alarms “clear.”
Centralized, Comprehensive Forecourt Management

Universal forecourt controller simplifies management of retail fuel sites and reduces equipment expenses by interfacing with all facets of forecourt operations.

Integra 3500™ Forecourt Controller

OPW proudly offers fuel retailers a forecourt controller that provides maximum flexibility and reliability on the forecourt. Unlike some competing controllers, the Integra 3500™ is compatible with a wide variety of forecourt equipment brands, seamlessly integrating with fuel control systems, electronic dispensers, tank gauges, POS systems and more to provide a comprehensive report of fuel site activities.

Applications

- Reconcile tank gauge, dispenser and fuel control data with POS totals
- Automated polling of dispensers and tank gauges provides real-time inventory information
- Controls electronic dispensers from different manufacturers
- Powerful software provides total wetstock management from a user-friendly interface

VERSATILE

Mix and match POS hardware platforms with any combination of dispenser brands to create a system that fits unique site configurations

ACCESSIBLE

Remote access allows authorized users to interact with the forecourt controller from any location

ECONOMICAL

The Integra 3500’s streamlined hardware significantly reduces energy consumption and equipment costs

EASY TO INSTALL

The Integra 3500’s “plug-and-play” design enables replacement of an existing forecourt controller in just 15 minutes

Specifications

- Dimensions: 37 cm x 30 cm x 10 cm (14.5 inch W x 12 inch H x 4 inch D)
- Operating Temperature: 0ºC to 50ºC (32ºF to 122ºF)
- Humidity: Non-Condensing (Max 95%)

- Typical Mounting Location: Indoor, Non-Hazardous Area
- Power Requirements: 96-264 VAC, 16/60 Hz
- Communication Ports: one (1) x Ethernet, one (1) RS-485, up to six (6) x RS-232, two (2) x USB, two (2) internal USB
Remote Accessibility

From initial employee training, to emergency support capabilities, a user with remote access is able to fully control the Integra 3500. This includes archive backup, upgrades, software updates, alarm remediation, etc.

- Access data and interact with the Integra 3500 Forecourt Controller anywhere an Internet connection is available
- Train employees on all forecourt management processes from one central location
- Users may be authorized to manage a single site or allowed visibility of multiple sites
- Implement software updates remotely and streamline troubleshooting with support professionals who can see exactly what's occurring with the forecourt controller in real-time
Operations in Europe, Middle East and Africa

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**OPW Retail Fueling**
Components and products to protect the environment and the consumer at retail fueling sites for conventional and alternative fuels.

**OPW Electronic Systems**
Innovative electronic tank gauges and fuel control systems to ensure customers know how much fuel they have and where it is going. Also, Automated Vehicle Wash Systems.

**OPW Chemical & Industrial**
Safe and efficient loading and unloading of critical hazardous chemicals: loading arms, swivel joints, sight flow indicators, quick and dry disconnect couplers, and safety breakaways.

**OPW Transportation**
Components and systems for use on Tank Trucks and Rail Tank Cars to ensure the safe handling, loading, transport and unloading of hazardous bulk products, including: petroleum, chemical and dry bulk cargo.