Gas Bottle Monitor
Never Run Out of Gas Again

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Gas Bottle Monitoring System
Continuous, Real-Time Supply Monitoring

Our Gas Bottle Monitor offers real-time monitoring of the available gas supply in gas bottles. It's equipped with low level alarms that will notify operators when supply is running low and a new bottle needs to be ordered. This eliminates the need for operator rounds to manually check gas supply while helping to prevent critical analyzer shut down and costly emergency gas deliveries – all at a fraction of the cost of traditional pressure monitoring solutions.

Never Run Out of Gas Again
- visual indication of pressure / level (gas supply)
- low level alarm notifications via text, email, or optional LED light
- transmit pressure readings to DCS, PLC, or building automation system via Modbus TCP
- eliminates manual operator rounds to check pressures
- reduces emergency gas deliveries and critical analyzer shutdowns

Performance
- Alarm: text, email, or optional LED light
- Range: 0 to 6,000 PSI
- Pressure Accuracy: 0.25% BFSL

Features
- user-friendly, color touchscreen interface with graphical display
- connect up to 12 rugged, industrial quality pressure transducers or expand far beyond with additional I/O options
- flexible design allows custom features or functions to be added as specified by the user
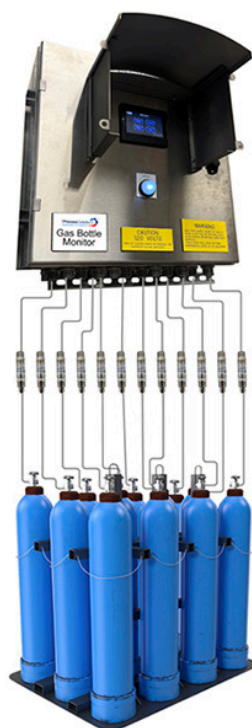- cost effective solution that saves operators time and money

Pressure sensors are used to constantly monitor the supply in gas bottles. As gas depletes, the pressure / level, and thus the supply, decreases. Low limit alarms will alert operators via text, email, or optional LED light when gas bottles are running low and a replacement needs to be ordered. Without a doubt, this pressure monitoring system helps users eliminate critical analyzer shut-downs and costly emergency gas deliveries.

Pressure sensors can be installed directly on the Gas Bottle Monitor, directly on the gas bottle itself, or anywhere along the stainless steel tubing in between. The system can be installed indoors or outdoors, and while the touchscreen interface can be read in direct sunlight, the Gas Bottle Monitor System includes a sun shade to protect the touchscreen from the elements.

Our Gas Bottle Monitoring Systems are ideal for refineries, gas processing facilities, analyzer buildings, gas chromatography users, hospitals, research facilities and universities, manufacturing facilities, and other users of industrial gases.

Pressure Sensors Directly on
Gas Bottle Monitor

Pressure Sensors Installed
Along Stainless Steel Tubing

Pressure Sensors Installed
Near the Gas Bottle

Affordable and Flexible
Tons of Built-In Features and Custom Options

Eliminate emergency gas deliveries and manual operator rounds, while preventing critical analyzer shut downs with the Gas Bottle Pressure Monitoring System, from Process Solutions Corp. The Gas Bottle Pressure Monitor includes rugged, industrial quality pressure sensors, alarm functions, and a color touchscreen interface that visually displays the pressure of the gas bottles. Additionally, it includes Ethernet connectivity, which allows easy integration with existing operations via Modbus TCP. Each monitor can connect up to twelve pressure sensors and is expandable with additional I/O. And it's all available at a fraction of the cost of a traditional pressure monitoring system.

Furthermore, our gas bottle monitoring system is both flexible and expandable. We can program custom features or functions into our bottle monitoring systems as specified by the user. And our electrical and programming engineers are happy to work directly with our users to include any functions and features to allow a seamless and hassle-free experience. Whether prebuilt or made custom to order, our team assembles these Gas Bottle Monitoring Systems in our in-house, ISO certified workshop.

Optional Features
- alarm via attached or external LED light
- custom programming or physical features can be added upon request
- integration with BACnet, Modbus, EtherNet/IP, LonWorks, other protocols
- an Advanced Bottle Monitor model is also available that includes additional built-in features

Advanced Gas Bottle Monitor Model
Increased Functionality and Data

While our standard model is well suited to fit the need of most gas bottle users, we also offer an Advanced Gas Bottle Monitoring System that expands the capabilities of the base model. The advanced model includes a QR code system that allows users to scan a QR code on the gas bottles to directly and easily access critical technical information about each bottle. Conveniently, this information includes the gas or blend type, concentration, composition, fill dates, expiration dates, lot numbers, serial numbers, and other manufacturer information. This allows users to know exactly what type and how much gas they have on-hand anywhere that web access is available.

Additionally, the advanced model offers timer based alarms. These alarms display new bottles in green, expired bottles in yellow, and empty bottles in red. Moreover, this feature helps users automatically maintain historical records of gas usage.

- 24/7, real-time gas supply readings, anywhere users have web access
- integration with building automation systems via BACnet, Modbus, LonWorks, EtherNet/IP, or other protocols
- QR codes on each bottle for easy access to gas or blend type, concentration, composition, fill dates, expiration dates, lot numbers, serial numbers, and other manufacturer information
- timer based alarms that color code bottles by status: green for new bottles, yellow for expired bottles, and red for empty bottles
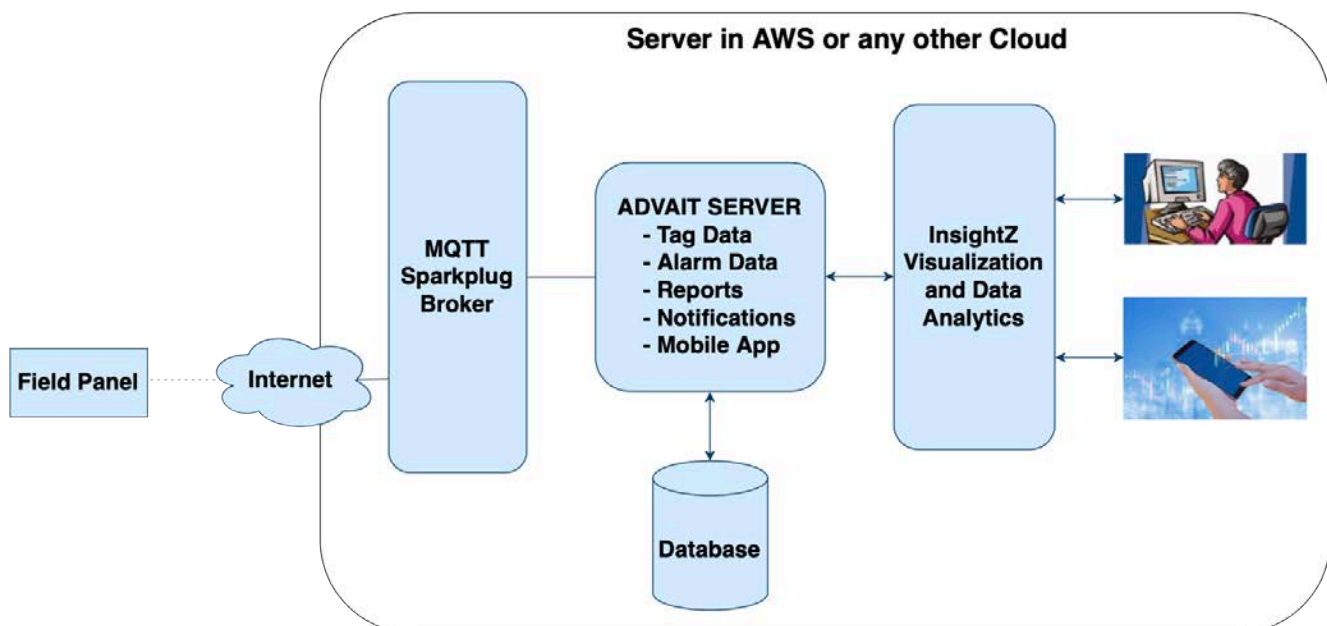- historical record keeping of gas usage, automatically uploaded to a cloud service

All Your Information In Real-Time

With included Ethernet capability, the Advanced Gas Bottle Monitor can be equipped with BACnet, LonWorks, Modbus TCP, EtherNet/IP, or other Ethernet protocols. This offers users the ability to easily integrate their bottle monitors with their existing DCS, PLC, or building automation systems. Additionally, it enables access to critical information through a cloud-based, password protected portal that comes with basic site maintenance and operational updates. Furthermore, users are granted 24/7, real-time view of gas bottle information, fill status, and current alarms. The Advanced Gas Bottle Monitor System can also store historical data and automatically upload information to a cloud service, such as Microsoft OneDrive or AWS, to streamline record keeping processes.

Cloud Machine Configuration:
• 2.5 Ghz or better
• 4Ccore / 16 GB server
• 200 GB hard disk
• email on SMTP configuration (customer provided)
• OS can be on Windows or Linux

Oxygen Deficiency Monitor

The OxyPro is a life-critical oxygen deficiency monitor that continuously measures O_2 in the atmosphere to ensure safe working conditions in confined spaces. It provides local alarming as well as remote monitoring of low oxygen levels. Built for longevity and accuracy, our oxygen deprivation monitor uses non-consumable paramagnetic sensor techno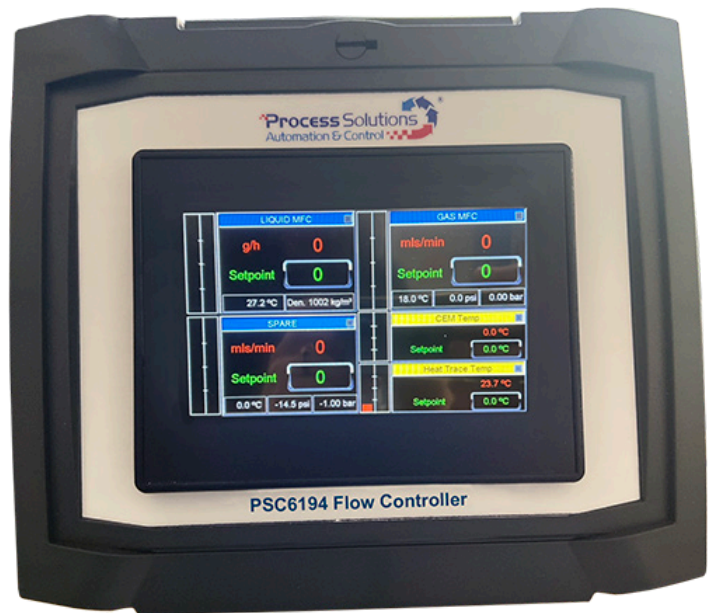logy to detect breathable oxygen concentration. It is an advanced alternative to oxygen detectors that use fuel cells, which deplete over time. It eliminates routine maintenance and frequent calibrations while increasing safety, reliability, and lowering lifetime cost of ownership.

Flow Control System

The PSC6194 Flow Controller is a readout and control system for use with the Bronkhorsts' Mass Flow Meters and Controllers. It is capable of data logging and other functions that are useful for batching or continuous production processes. Its user-friendly, color touchscreen controls allow for multichannel configuration for up to 4 channels and enables users to easily view or change built-in functions including measured value, setpoint, instrument range, trending values totalizer with limit, value, new setpoint, and more

Controlled Evaporation System

Our Controlled Evaporation System is capable of generating low flow vapor streams. This system is an alternative to traditional bubbler systems and provides a highly precise, repeatable, and controllable vapor generation process in ready-to-use/out-the-box or customizable packages, which includes:

- liquid an flow meter with controls
- gas flow controller
- user-friendly, color touchscreen process controller
- controlled Evaporative Mixer (CEM) with mixing valve
- heat exchanger, temperature sensors, and controller

Learn More

Dosing Systems

Our Liquid Dosing Systems eliminate guess work in the dosing of fuels and other liquids. It features an easy to operate user interface that relies on color touchscreen controls and fully automatic operation with alarming and quick shutdown.

- built-in security features
- customizable to fit customer requirements
- universal supply by AC or DC
- automatic mode: alarming, quick shut down, totalizer for batching, real-time fueling mode for volumetric ratios
- manual mode: testing, troubleshooting, and calibration

Learn More

Process Solutions Corp.
Automation and Control Specialists

As a leading distributor of industrial instrumentation, Process Solutions Corp., interacts with a wide range of industrial processes. Our expertise is identifying issues and exploring ways to both resolve and to prevent future process disruptions. Using the best technology available, our engineering team has developed numerous full-packaged solutions that help streamline and automate tedious processes to improve efficiency and reliability, while offering critical feedback and real-time process data to users.

Our valuable strategic partnerships from around the globe allow us to offer the high-quality products with a great value. These partnerships, backed by our engineers, sales team, field technicians, and our in-house, ISO certified workshop, have allowed us to build a reputation as a full-service provider for industrial automation solutions. From gas processors to research institutes and universities, to commercial manufacturers, and much more, we have grown since 1999 to become one of the most trusted brands in the industry.

All-in-One Controllers

Signal Conditioning

Low Flow Meters, Valves

Pressure Sensors

Wireless Monitoring

Level, Flow, Interface

Connectivity

Surge and Lightning

LVDT Sensors

Industrial Analyzers

Control & Networking

ISO 9001:2015

ISNetworld Verifed

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