



# Gas Bottle Monitoring System

Never Run Out of Gas Again!

- visual indication of pressure / volume
- · alarm notifications when bottles are low
- transmit pressure readings to DCS
- eliminate operator rounds to check pressures
- cost effective solution to reduce emergency gas deliveries and critical analyzer shutdowns

## Gas Bottle Monitoring System

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 prevent critical analyzer shutdown and costly emergency gas deliveries all at a fraction of the cost of traditional pressure monitoring solutions.

### Performance

Range

Alarm

Pressure Accuracy

0 to 6.000 PSI text, email 0.25% BFSL

#### **How it Works**

Pressure sensors are used to constantly monitor the supply in gas bottles. As gas depletes, the pressure, and thus the supply, decreases. Low limit alarms will alert operators before the bottle runs empty to help ensure new gas bottles can be ordered in advance. Alarms can be custom programmed to alert operators via text, email, or optional LED lighting.

The pressure sensors can install directly on the Gas Bottle Monitor, directly on the gas bottle itself, or anywhere along the stainless steel tubing in between.

#### **Features**

The Gas Bottle Monitor includes rugged, industrial quality pressure sensors, a user-friendly color touchscreen interface to graphically display the pressure of gas bottles, low limit alarm functions, and Modbus connectivity, which allows easy integration with existing operations. Additionally, our Gas Bottle Monitoring System is extremely flexible and we can customize the system per user specification.

- user-friendly, color touchscreen interface
- · connect up to 12 pressure sensors or more with the addition of I/O
- custom or preprogrammed alarms

## **Optional Features**

- · alarm via LED light
- custom programming and physical features can be added upon request
- BACnet, Modbus, and LonWorks integratio
- · an Advanced Model is also available, which offers real-time supply readinds, timer based alarms, QR coding system, and historical record keeping of gas usage data.

## **Common Applications**

Refineries, gas processing facilities, analyzer shelters, gas chromatograph users, hospitals, research facilities and universities, manufacturing facilities, and other users of bottled industrial gas.













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Advanced Model

- QR code scanning system indicating gas type, concentration, fill / expiration dates, lot / bottle serial numbers
- · timer based alarms that color code new bottles in green, expired bottles in yellow, and empty bottles in red
- · automated historical documentation uploads to cloud services such as Microsoft OneDrive or AWS
- 24/7 real-time viewing of gas bottle supply

#### **Advanced Gas Bottle Monitor**

In addition to our Standard Model, we offer an Advanced Model that adds functions, features, and flexibility to our Gas Bottle Monitoring System. The Advanced Gas Bottle Monitor integrates a QR scanning system where supplier QR codes for each bottle allow users to access critical technical information such as gas or blend type, concentration, fill and expiration dates, lot numbers, and bottle serial numbers, which is available real-time via a cloud-based service. With the addition of timer-based alarms, gas bottles visually display color codes to indicate the status of each bottle. New bottles display in green, expired bottles display in yellow, and empty bottles display in red.

## **Ethernet Connectivity**

Ethernet capability allows the Advanced Model to be equipped with BACnet, LonWorks, Modbus, or other Ethernet protocols, offering easy integration into your existing DCS, PLC, or building automation system. This enables access to critical information through a cloud-based, password protected portal that comes with basic site maintenance and operational updates. Users are granted 24/7, real-time view of gas bottle information and status. This system can also store historical data and automatically upload information to a cloud service such as OneDrive or AWS, to streamline record keeping processes.

#### **Cloud Machine Configuration:** Server in AWS or any other Cloud • 2.5 Ghz or better 4Ccore / 16 GB server 200 GB hard disk email on SMTP configuration **ADVAIT SERVER** (customer provided) - Tag Data InsightZ **MQTT** Visualization - Alarm Data OS can be on Windows or Linux **Sparkplug** - Reports and Data **Broker** - Notifications **Analytics** - Mobile App Field Panel Internet Database





