

## Wireless Gauge Reader

**Description:** Non-invasively read legacy manual gauges and transmit the data to a PC, data acquisition or automation system

- Monitor critical process or facility parameters and display on operator console
- Enable notification when readings exceed limits
- Gather data to enable trend analysis, or to apply statistical process control
- Connect gauge data to control system to trigger actuation of motors, valves and pumps

The Airgas Wireless Gauge Reader (WGR) is more cost effective and requires less time to install than a new transducer. It does not require the removal of old gauges, breaking of pressure seals, learning new software, or interruption of the underlying process. Just clamp it on to an existing gauge and in minutes, wirelessly acquire readings on an existing data acquisition or control system.

Wireless Monitoring

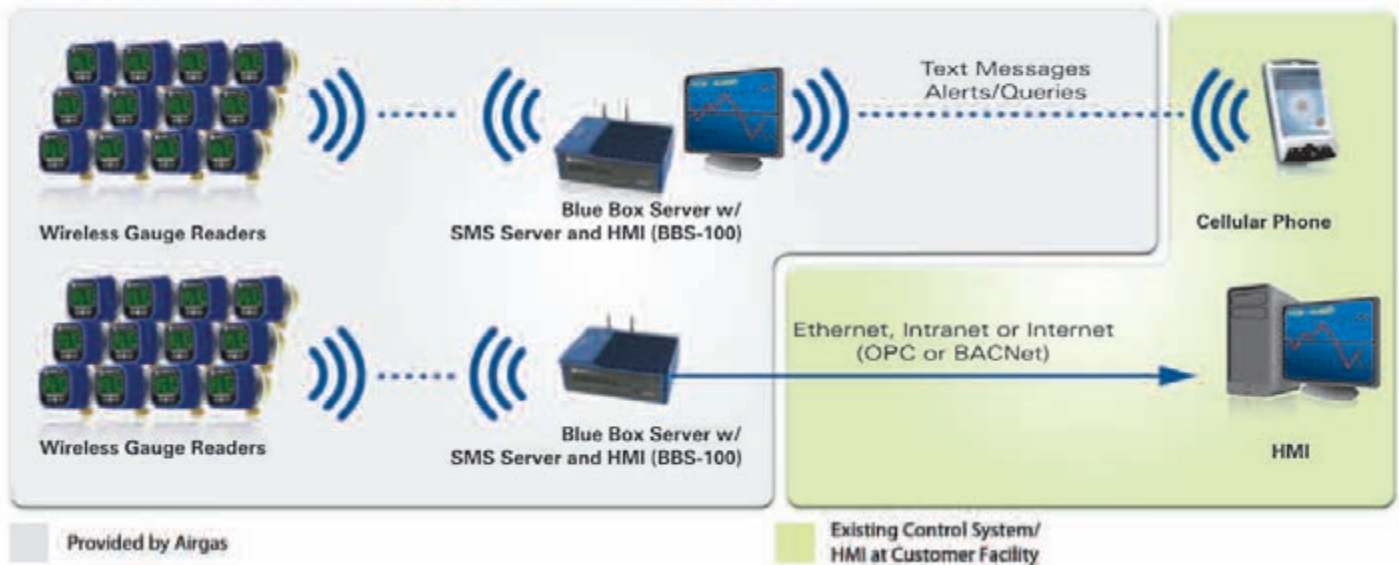
MONITORING SYSTEMS



### Design Features

- Non-invasive, easy clamp on fit—no need to break seals
- 1.5" to 4.6" diameter gauges from most manufacturers
- Uses robust and highly optimized industrial DSSS radio and protocol with antenna and frequency diversity
- Battery life up to 3 years
- Low battery indicator
- NEMA4/IP66 enclosure for indoor/outdoor use
- Accuracy  $\pm 1.5\%$  of full scale, comparable to typical person reading gauge
- One-time calibration and setup
- No new software to install—data can be viewed using standard web browser
- FCC, RoHS and ETSI compliant
- Optional connectivity to existing building or plant automation systems via OPC or BACnet

## Two Possible Wireless Gauge Reader Configurations



### WIRELESS GAUGE READER (WGR-100)

Specifications	
Gauge Compatibility:	Most gauges from 1.5" to 4.64" (38mm to 114mm) diameter
Gauge Mounting:	Adapters with removable clamps
Data Capture Rate:	User-configurable: 1 sample per 5 seconds to 1 sample per 18 hours
Accuracy:	± 1.5% of full scale gauge reader (e.g. ± 1.5 psi for 0 to 100 psi pressure gauge)
Wireless Frequency:	2.4GHz Direct Sequence Spread Spectrum, 50mW peak output
Wireless Range:	Up to 1150 ft (350m), high interference immunity, extendable with repeaters
Wireless Protocol:*	Airgas Semiconductor's highly optimized industrial DSSS radio and protocol. Integrates robust security, antenna and frequency diversity, optional encryption and minimal interference with existing wireless systems.
Approvals:	FCC Class B compliant, RoHS, ETSI compliant
Power Supply:	Two 3V lithium batteries
Battery Life:	>1 year @ 1 sample per 5 min, >3 years at 1 sample/hour (approximate)
Vibration:	Up to 4G rms
Humidity:	10-99%RH, non-condensing
Operating Temperature:	-4°F to 158°F (-20°C to 70°C)
Storage Temperature:	-40°F to 176°F (-40°C to 80°C)
Enclosure:	IEC IP66 compliant (outdoor, water resistant)
Housing Material:	ABS with UV inhibitors
Display:	LCD display (for manual reading)
Dimensions:	2.6" x 2.6" x 1.3" (65mm x 65mm x 33mm)
Weight:	0.33lbs (150g) including batteries

\*All wireless devices use Airgas Semiconductor's industry-leading frequency agile protocols providing unmatched interference immunity and co-location capabilities.

### OUR FAMILY OF PRODUCTS:

					
WIRELESS PNEUMATIC THERMOSTAT (WPT)	WIRELESS GAUGE READER (WGR-100)	WIRELESS STEAM TRAP MONITOR (WSTM-100)	WIRELESS FREEZER MONITOR (WFM-100)	WIRELESS TRANSDUCER READER (WTR-100)	BLUE BOX SERVER (BBS-100)