

Mechanical Freezer Monitor

Wireless Monitoring

MONITORING SYSTEMS

Description: Monitor the overall status of your freezers to predict freezer failures before they occur so you don't lose critical materials or samples.

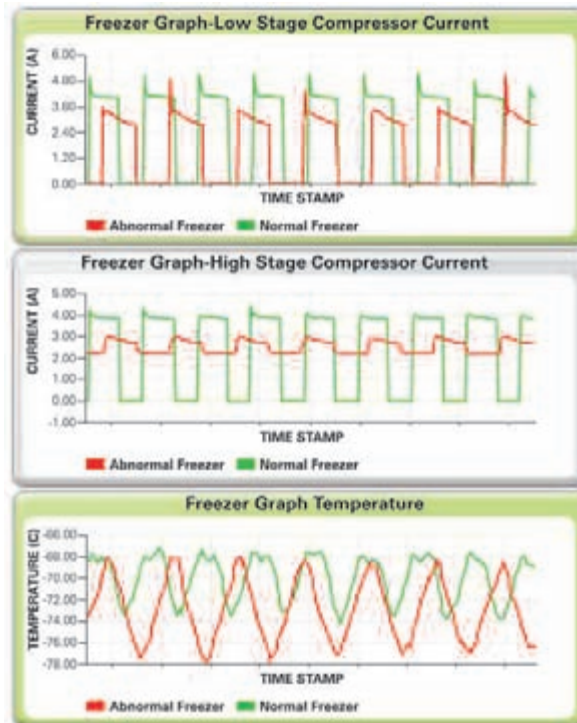
Freezer failures can result in loss of critical materials or samples. However, this can be avoided. Monitoring temperature alone does not give you enough advanced warning to know when a freezer is about to fail. It is merely an indicator that a problem has already occurred.

The Airgas Wireless Freezer Monitor (WFM) allows you to monitor critical parameters to determine freezer functioning status. By monitoring the internal temperature as well as the door switch status and compressor current draw (high and low side), you can see problems before they result in failures.

No more moving samples at the last minute as your freezers are failing. You can schedule maintenance before it becomes critical. There's no new software to install. Simply open a web browser and you can view the data or set alarms in minutes. Alternatively, you can connect the system to your existing building or plant automation system using industry standard protocols.

Design Features

- Monitor status of freezers holding critical material or samples
- Predict costly freezer failures before they occur
- Provide early warning of freezer failure
- Minimize required preventative maintenance
- Measure critical freezer parameters including high-stage and low-stage compressor current, door open/close status, and internal temperature
- Retrofit installation on existing freezers
- One-time calibration and setup
- No running wires for monitoring
- Battery life of 3+ years
- Uses robust and highly optimized industrial DSSS radio and protocol with antenna and frequency diversity
- 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



WIRELESS FREEZER MONITOR (WFM-100)

Specifications	
Analog Data Inputs:	User-configurable: Typically internal temperature, door switch, high side compressor current, low side compressor current
Number of Inputs:	Up to four inputs per WFM
Data Capture Rate:	User-configurable
Thermocouple:	Type K, -328°F to 482°F (-200°C to 250°C)
Current Sensor:	Standard: Split core, 0-20A DC. Other current sensors available upon request.
Wireless Frequency:	2.4GHz Direct Sequence Spread Spectrum, 100mW peak output
Wireless Range:	Up to 1600 ft (488 m), high interference immunity, extendable with repeaters
Wireless Protocol:*	Airgas'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:	Standard 110-240VAC or battery powered
Battery Life:	>3 years (approximate)
Humidity:	10-99%RH, non-condensing
Operating Temperature:	-4°F to 158°F (-20°C to 70°C)
Storage Temperature:	-40°F to 185°F (-40°C to 85°C)
Enclosure:	Rugged extruded aluminum industrial chassis (optional NEMA4/IP66 enclosure)
Dimensions:	5.7" x 2.2" x 1.6" (145mm x 57mm x 42mm)
Weight:	0.51 lbs (230g)

*All wireless devices use Airgas'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)