

## FEATURES

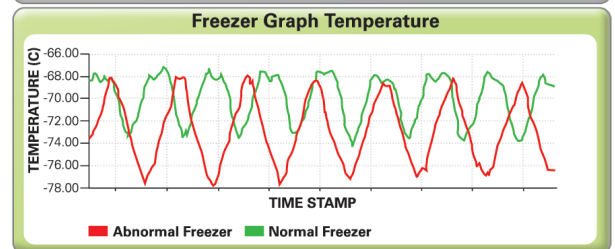
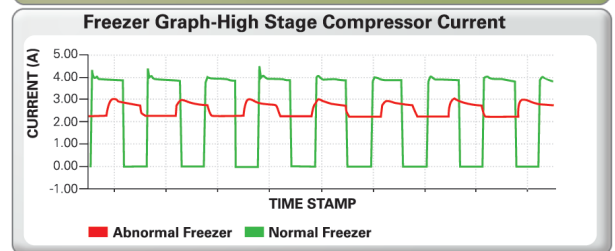
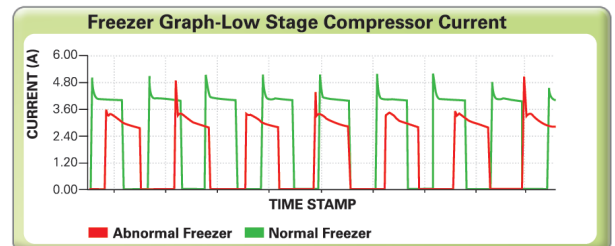
- Monitor health of freezers holding critical material or samples
- Predict costly freezer failures before they occur
- Provide early warning of freezer failure
- Minimize required preventative maintenance
- Measure critical freezer parameters including high-stage and low-stage compressor current, door 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

### Monitor the overall health 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's merely an indicator that a problem has already occurred.

The Cypress Envirosystems Wireless Freezer Monitor (WFM) allows you to monitor critical parameters to give you a better picture of freezer health. 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 results 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.



## KEY PRODUCT SPECIFICATIONS

### WIRELESS FREEZER MONITOR (WFM-100)

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

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

### OUR FAMILY OF PRODUCTS:

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

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