

Freezer Warehouses

Freezer warehouses typically involve large volumes of frozen products or food that are delivered to the freezer warehouse in containers or on trucks for storage until the importer, owner or broker can arrange sale to the marketplace. At which point, the freezer warehouse management team breaks down the product for shipment and ultimately schedules delivery to the retailer. A freezer warehouse may contain over ½ billion dollars of frozen foods stored at a variety of temperatures. A typical environment has coolers at 28°F, freezers at 0°F and deep coolers at -20°F.

Monitoring temperatures in this environment typically involves the following:

- Monitoring Freezers
- Monitoring Engines
- Monitoring Air Handler Temperatures
- Monitoring Temperature in Various Warehouse Locations
- Ambient Outdoor Temperatures
- Monitoring Shipping/Receiving/Loading Dock Areas

Purchase Justification:

1. Reporting and compliance with FDA regulations
 - Precision record keeping with history accessible via the internet.
2. Cost avoidance
 - Lower energy costs.
3. Differentiation to customers
 - Offer customer reports and let customers view their products on the web.
4. Preventative measures
 - Never have an incident that can result in product loss.

Typical installation:

Multiple IT Temperature Monitor E8's, Approx \$1500, 16 or more probes
 Multiple IT Temperature Monitor E16's, Approx \$3000, 32 or more probes

Note: Many warehouse managers use the IT Temperature Monitor as a differentiator to their customers. They explain that the product owner/distributor can actually view the warehouse environment from a web site and the seller and the consumer are all assured that the product is frozen per specifications.

Installation Time: Typical installation time is 8 hours, including the placement of probes.

Software selections:

Windows	Web	Linux
IP Sentry (http://www.ipsentry.com)	EMS (http://www.sensatronics.com/ems)	Nagios (http://www.nagios.org)
Tempelert (http://www.tempelert.com)	Dotcom-Monitor (http://www.dotcom-monitor.com)	Big Brother (http://www.bb4.com)
Big Brother (http://www.bb4.com)		
Intellipool Network Monitor (http://www.intellipool.com)		

Typical Customers:

Freezer warehouses dealing with poultry, meat, seafood, dairy or desert products benefit from the IT Temperature Monitor. Most major metropolitan areas have multiple freezer warehouses. Sample companies are Karps, which is a division of Baker and Baker, or Highwood Freezer Warehouse and Londonderry Freezer Warehouse, which are Sensatronics customers.