



ELEMENT-T DATA SHEET

The Element-T (ET) continuously protects your valuable, temperature-sensitive assets from damage. ET is a wireless, portable, Internet of Things temperature sensor used to monitor the temperature of critical equipment. The Element-T uses a thermocouple to measure temperatures and transmits those readings to a WiFi and cellular-enabled tablet. The tablet, or gateway, securely uploads these temperature readings to the Elemental Cloud.



Performance Highlights:

- Battery operated. No wires
- Easily expandable platform - just add more Elements
- Installs in less than one minute
- No mounting screws or other hardware required. Magnetically mounted.
- Continuously reads temperature every 15 seconds
- Gateway provides WiFi and cellular connection

Communication

- Sample rate: Temperature data is sent to the Cloud every 15 seconds
- Communicates via Bluetooth Low Energy (BLE) to Elemental Gateway
- Requires Elemental Gateway with WiFi network access
- Wireless Range of approximately 10 meters

Readings:

Temperature

Sensor Specifications:

Size	2.25" X 1.6" X 1"
Power requirements	2 AAA lithium batteries
Battery lifetime	~9 months
Temperature (Element-T electronics)	Range: 5C to 45C, Accuracy $\pm 0.5C$
Temperature (Omega Thermocouple probe)	Range: -200C to +200C, Accuracy $\pm 1.0C$
Standard Thermocouple length	36" (91 cm)
NIST Certified	Optional, at additional cost



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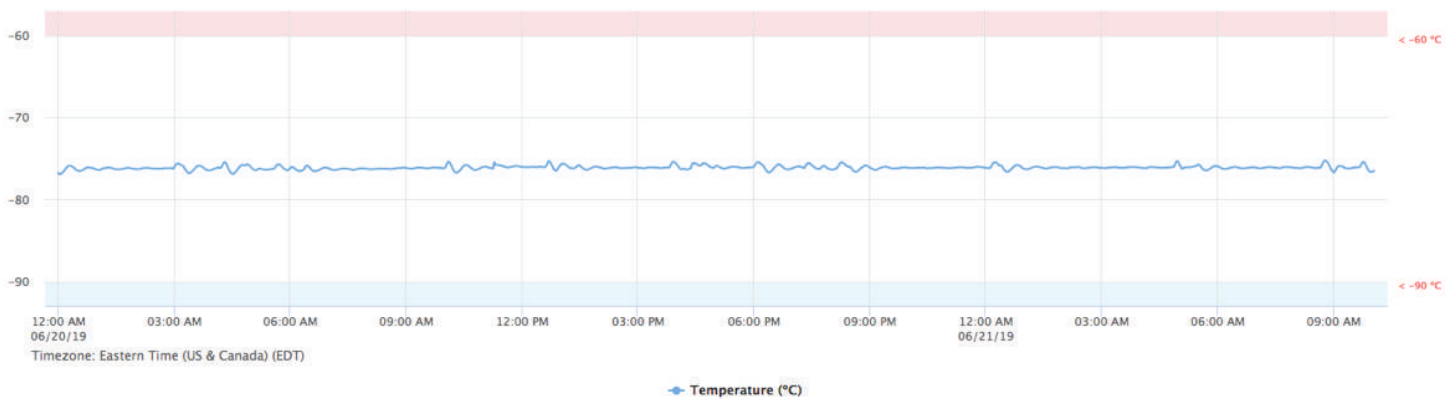
Installation

The Element-T is typically mounted magnetically to the outside of the asset it is monitoring. It contains a very strong magnet that holds it firmly in place. If it is attaching to a non-ferrous surface, you can use double-sided Velcro to hold it in place. There are no mounting holes or screws required.

Typical Applications:

- Freezers
- Refrigerators
- Incubators
- Ovens

Display of data (from Dashboard as an example).



Dashboard

- All data stored in Cloud. Eliminates data silos. Accessible from anywhere you have an internet connection
- Alerts are fully customizable - Our robust rules engine allows you to customize alerts via SMS and/or email when your equipment or environment deviates from the norm, even during power outages. You can also automate your alerting workflow via escalating messaging so that the right people are notified at the right time.
- Claim alerts and add notations to data sets for regulatory compliance - When alerts are triggered due to non-conformances, your Quality Team can directly comment and annotate their corrective actions within the system for audit-friendly reporting.
- API allows sharing of data to LIMS/ELN or other databases
- Audit reports - automates electronic data capture to improve data integrity and record keeping for audit reports and regulatory compliance. Instrument and/or process data can be captured in accordance to 21 CFR Part 11 requirements to automatically generate audit-friendly reports, freeing up hours of time for your staff.
- Calibration – NIST calibrated sensors are available and adjustable through a dashboard correction to ensure your sensors are always in compliance.
- Utilization - Door open events on cold storage and incubators offer valuable insight into asset utilization. Such data can assist operations directors in making key maintenance decisions.
- Fully customizable groups and access
- 21 CFR part 11 compatible for electronic records