

SensTAG™ UHF-EPC RFID DATA LOGGERS

Battery-Assisted (long-range)

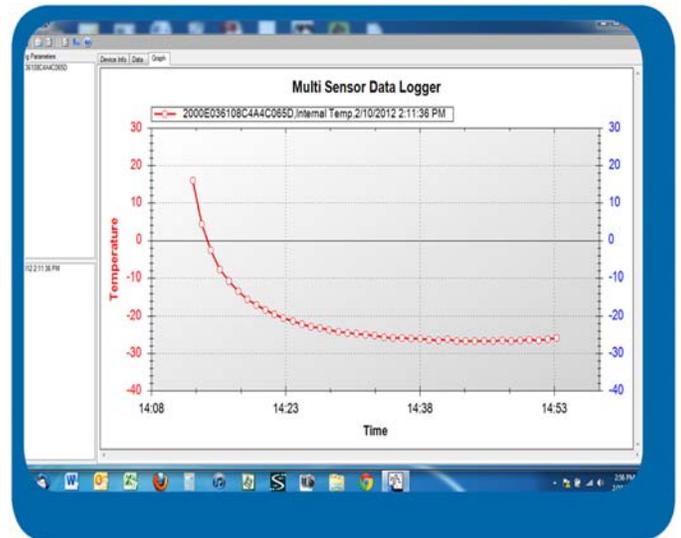
+ UNIQUE BREAK-THROUGH FEATURES

- **Low Cost Data Logging** (based on battery assisted passive RFID)
- **Uses Existing UHF EPC Gen 2 Readers** to read recorded temperature
- **Long read range:** 5+ meters with high power fixed reader
- **Mobile:** read sensors as they pass by a reader
- **Embedded Sensors:** read through walls, boxes, wood, plastic
- **Temperature Sensing:** Calibrated for optimum accuracy at desired sensing range
- **Cold Chain Temperature Range and Accuracy:** -20°C to 40°C @ +/- 0.5°C. (-4°F to 104°F @ +/- 1.0°F)
- **Wide Temperature Range Version:** -40°C to 120°C @ +/- 2.0°C. (-40°F to 248°F @ +/- 4.0°F)
- **Multi-Sensor Versions by Special Order:** Humidity, Shock,
- **Ultra High and Low Temperature Range:** with tethered sensors placed in the cold or hot location
- **Custom Antennas Available:** for Metal-Mount or optimized for mounting to liquid filled containers
- **Configurable Data Logging** with PC interface.
- **Customized sensor tags** —our specialty.*
- **Easy to Install**—no wires to connect.
- **Totally Sealed**—submersible, rugged.

Experts in RFID Sensing
that We Invented



Credit Card Passive RFID Sensor



Temperature—Time graph uploaded from SensTAG™ data logger

*We specialize in providing innovative sensing systems for hard-to-solve sensing problems. In addition, we offer a range of semi-custom products and complete turnkey manufacturing of custom sensing solutions for volume commitments.

m a i n t e n a n c e - f r e e | m i n i a t u r e | m o b i l e | r u g g e d



Contact Phase IV Engineering to explore how our innovative wireless sensing technology can work for you.

Call 1-303-443-6611
x 101 or x 114



Data Logger with internal and external tethered sensor.



Software configuration enables the data logger to be configured with sampling interval and temperature logging ranges.

Specifications: **SensTAG™** UHF RFID Battery Assisted Passive Data Logger

Physical

Size: Standard size - credit card.
*Down to 10mm x 4 mm. We specialize in custom packaging.

Reader & RF Specifications

Operating frequency: 860-960 MHz Ultra High Frequency (UHF)
Read/Write Range: 5+ meters using high-power reader.
ID: Unique identifier EPC code for each device.
Reader Commands Required: Standard Read/Write for many applications.
Some applications may require custom commands

Sensor Performance*

(Internal)

Temperature Measurement Range and Accuracy:

Cold Chain: -20°C to 40°C @ +/- 0.5°C (-4°F to 104°F @ +/- 1.0°F)
Wide Range: -40°C to 120°C @ +/- 2.0°C (-40°F to 248°F @ +/- 4.0°F)

Sampling Intervals: Programmable from 1 second, to 1 day.
Alerts (data logger): 4 adjustable temperature threshold settings.*
Calibration: Calibration optimized for the application/stored in memory

Additional Sensor Options

Up to 2 additional temperature sensors, humidity, shock, and others available with custom development

Memory (Data Logging Mode)

Mode and Capacity: Time-based data logging: 800+ time-stamped logs
Limit based data logging: 1,000+ sensing violation events based on 4 user-selectable limits.*

Electrical Specifications

Power source: Lithium Coin cell. Battery Life 1 to 5 years, depending timing settings

Certification/Regulatory

ISO Standards: Fully compliant with ISO 18000-6C.
EPC: EPC Class 1, Gen2 (with custom commands).

***UHF SensTAGs are highly configurable. A microprocessor-based "Smart" SensTAG is also available that offers options beyond these specifications. We specialize in custom RFID Sensors. Call us with your unique sensing challenges.**

SensTAG™ and all Phase IV Engineering product names and the Phase IV logo are trademarks of Phase IV Engineering, Inc. All other brands and product names are trademarks or registered trademarks of their respective owners. Phase IV reserves the right to change specifications and features without notice.

maintenance-free | miniature | mobile | rugged

