



## Industrial Data Thermometer

The only *Bluetooth*<sup>®</sup> low energy technology-enabled handheld thermometers made in the U.S.A. that offer data logging, storage and transmission out-of-the-box, along with superior accuracy, 1000–hour battery life, and a 3–year warranty.



## **FEATURES**

- Superior Accuracy ±(0.04% |rdg| + 0.3 °C)
- Probe Offset
- 1000-Hour Battery Life
- Displays Real-Time Statistical Data
- Data Logging and Wireless Transmission Capability
- Creative Ergonomic Design
- 3–Year Warranty
- Made in USA

**TRUST** is an essential feature in any measurement tool and TEGAM's new 900 Series thermometers are instruments you can **rely on every day** with confidence. These new models are the most accurate thermometers ever offered by TEGAM to meet the increasing demands of regulatory requirements in food, pharmaceutical, and materials applications where process temperature measurement is critical. Superior instrument accuracy, combined with the "Probe Offset" feature to zero out probe errors, makes their "system" accuracy unmatched in the industry.

The single channel Model 931B and dual channel 932B thermometers boast **1000-hour battery life** using three off-the-shelf AA batteries to provide convenient, dependable, uninterrupted, low-cost portable measurement capability without expensive batteries, AC adapters or chargers.

**Real-time statistical data** increases user productivity, process efficiency and product quality. Displayed on-demand, MIN, MAX, AVG, RANGE and STDEV (standard deviation) provide critical process information and diagnostics that allow the user to analyze manufacturing processes on the fly and make immediate adjustments for maximum efficiency and quality.

The **onboard data-logging** feature of the TEGAM 931B and 932B thermometers allows users to accurately record and store up to 1000 time-stamped measurements at the touch of a button, review them on the device, and transfer them, using *Bluetooth*<sup>®</sup> low energy technology, via a mobile device or PC, to local or cloud storage at their convenience. This seamless connectivity allows the user to collect, transmit and store accurate temperature data for analysis or compliance reporting without any additional or third party software.

For custom implementations and integration into existing quality and business systems, TEGAM offers the 900 Series Developers' Kit, model number SDK-93X. Complete with Windows, Android<sup>™</sup>, and iOS sample programs and source code, *Bluetooth*<sup>®</sup> adapter, and qualified technical support, the Developers' Kit provides users the ability to design the ideal temperature data collection system for their operations.

The creative ergonomic design makes these instruments easy to hold, easy to read and easy to clean. **Designed for one-handed operation**, these tools are comfortable to carry and use for extended periods of time. The smooth, sleek, seamless case means cleaning is quick and simple.

Like all TEGAM products, the 900 Series thermometers are designed, assembled and tested in the United States. TEGAM backs this durable instrument with a standard **3-year warranty** to assure you that your investment is sound.

For over 30 years, TEGAM has been building hand held thermometers for challenging applications. TEGAM's 900 Series extends that experience into new thermometers tasked with producing **reliable thermocouple measurements in all types of environments**. They are designed to be durable and easy to use, with advanced features that outmatch your challenges.

## When the Measurement Matters, Be Certain with TEGAM.



DATA THERMOMETER

## **Specifications**





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|--|--------------|---|--|-------------|--|
| Basic Accuracy*  | ±(0.04       | %  rdg  + 0.3 °C)   |  |             |  |
| <b>Recommended Calibration</b>   | Cycle 2 year | S   |  |             |  |
| Temperature Ranges   | °C           |   | °F   | К           |  |
| К  | -200 t       | o 1372  | -328 to 2502   | 73 to 1645  |  |
| J  | -210 t       | o 1200  | -346 to 2192   | 63 to 1473  |  |
| т  | -250 t       | o 400   | -418 to 752  | 23 to 673   |  |
| E  | -250 t       | o 1000  | -418 to 1832   | 23 to 1273  |  |
| В  | 600 to       | 1820  | 1112 to 3308   | 873 to 2093 |  |
| N  | -250 t       | o 1300  | -418 to 2372   | 23 to 1573  |  |
| R  | -50 to       | 1767  | -58 to 3213  | 223 to 2040 |  |
| S  | -50 to       | 1767  | -58 to 3213  | 223 to 2040 |  |
| Connector Type   | Mini-T       | Mini-TC   |  |             |  |
| Probe Zero Function  | Resol        | Resolution 0.1 °C/°F/K  |  |             |  |
| Display  | 4-Digi       | 4-Digit Auto-Resolution (0.1°<1000°, 1°≥1000°) with Backlight and Function Annunciators |  |             |  |
| Reading Rate 3/sec. for Readings and TREND indicators  |              |   | ID indicators  |             |  |
| Battery Type   | 3 A A        | 3 AA (IEC LR6, ANSI 15) Alkaline  |  |             |  |
| Battery Life   | 1000 H       | 1000 Hours  |  |             |  |
| Statistics   | Min, M       | Min, Max, Avg, Rng, T1-T2 and Std Dev   |  |             |  |
| Clock  | Real c       | Real or Elapsed Time based on mode  |  |             |  |
| <b>Operating Environment:</b>  |              |   |  |             |  |
| Temperature  | -20 to       | -20 to 55 °C -4 to 131 °F   |  |             |  |
| Humidity   | 5 to 9       | 5 to 95%, 10 to 30 °C 5 to 95%, 50 to 86 °F   |  | =           |  |
| Altitude   | 0 to 4       | 0 to 4600 m 0 to 15,092 ft.   |  |             |  |
| Vibration  | Rando        | Random 10-500 Hz, 0.03 g <sup>2</sup> /Hz   |  |             |  |
| Shock  | 30g H        | 30g Half Sine   |  |             |  |
| Drop   | 4 drop       | 4 drops from 1 m to concrete  |  |             |  |
| Dimensions   | 193 X        | 193 X 84 X 28 mm 7.6 X 3.3 X 1.1 in.  |  |             |  |
| Weight   | 362.9        | 362.9 g 12.8 oz   |  |             |  |
| Communication  | Blueto       | Bluetooth® low energy technology / version 4.0, 10 m Range                              |  |             |  |
| Internal Data Storage  | Last 1       | Last 1000 Measurements with Time Stamp  |  |             |  |
| Storage Modes  | Auton        | Automatic and Manual  |  |             |  |
| Remote Operation   | Andro        | Android <sup>™</sup> , Apple Mobile Device Applications                                 |  |             |  |
| Data Storage Rate  | User F       | User Programmable, 1s Minimum Interval  |  |             |  |
| Warranty   | 3 year       | 3 year Parts & Workmanship  |  |             |  |
| Calibration Guarantee  | 2 year       | 2 year  |  |             |  |
| Included Accessories   | 3 AA I       | 3 AA Batteries, Quick Start Guide, Certificate of Traceability                          |  |             |  |
| <b>Optional Accessories</b>  | Tilt St      | Tilt Stand/Magnet/Hanger, Foam-Filled Hard Carry Case, Developers' Kit, Printed Manual  |  |             |  |
| Available Probes   | See T        | See TEGAM Temperature Probe Selection Guide for available probes.                       |  |             |  |
| Ordering Information   | Model        | Description   |  |             |  |
| Thermometers   | 931B<br>932B |   | Data Thermometer, Single Input<br>Data Thermometer, Dual Input   |             |  |
| 911-910   911-912   Accessories 911-911   SDK-93X   931B-900   |              | Tilt Stand/Magne<br>Tilt Stand/Magne<br>Foam-Filled Hard<br>900 Series Develo           | Tilt Stand/Magnet/Hanger (factory installed)<br>Tilt Stand/Magnet/Hanger (user installed)<br>Foam-Filled Hard Carry Case (911B, 912B, 931B and 932B)<br>900 Series Developers' Kit<br>Printed Manual |             |  |

\*Accuracy based on recommended calibration cycle.

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