

Verdict® 4K: HT (high temperature datalogger)

The Verdict® 4K: HT datalogger are rugged, self-sufficient systems that measure temperature and record the result in a protected memory section. The recording is done at a user-defined rate. A total of 4096 16-bit readings taken at equidistant intervals ranging from 1min. to 255 min. can be stored. In addition to this, there are 512 bytes of SRAM for storing application-specific information and 64 bytes for calibration data. A mission to collect data can be programmed to begin immediately, or after a user-defined delay or after a temperature alarm. Access to the memory and control functions can be password protected. The Verdict 4K: HT is configured and communicates with a host computing device through the serial 1-Wire® protocol, which requires only a single data lead and a ground return. Every Verdict® 4K: HT is factory-lasered with a guaranteed unique 64-bit registration number that allows for absolute traceability. The durable stainless-steel package is highly resistant to environmental hazards such as dirt, moisture, and shock. Accessories permit the Verdict® 4K: HT to be mounted on almost any object, including containers, pallets, and bags.

While all Verdict® data loggers are calibrated/validated against NIST traceable reference devices, Verdict® offers validation certificates for the 4K: HT data loggers. Based upon the registration number (or list of numbers) a validation certificate in PDF format is available for each individual datalogger.

Key Features

- Automatically Wakes up, Measures Temperature and Stores Values in 8KB of Datalog Memory in 16-Bit Format
- Digital Thermometer Measures Temperature with 11-Bit (0.0625°C) Resolution
- Accuracy of $\pm 0.5^{\circ}\text{C}$ from $+20^{\circ}\text{C}$ to $+75^{\circ}\text{C}$ with Software Correction
- Water resistant or waterproof if placed inside capsule (Exceeds Water Resistant 3 ATM requirements)
- Sampling Rate from 1 min. up to 255 min.
- Programmable Recording Start Delay After Elapsed Time
- Programmable High and Low Trip Points for Temperature Alarms
- Quick Access to Alarmed Devices Through 1-Wire Conditional Search Function
- 512 Bytes of General-Purpose memory
- 64 Bytes of Calibration Memory
- Two-Level Password Protection of All Memory and Configuration Registers
- Communicates to Host with a Single Digital Signal at up to 15.4kbps at Standard Speed or up to 125kbps in Overdrive Mode Using 1-Wire Protocol
- Operating Range: 0 to $+125^{\circ}\text{C}$
- Meets UL#913 (4th Edit.). Intrinsically Safe Apparatus: Approved Under Entity Concept for Use in Class I, Division 1, Group A, B, C and D Locations

Applications/Uses

- Environmental and Thermal Management Systems (HVAC)
- Human and Animal Temperature Monitoring.
- Monitoring of processes that require temperatures close to the boiling point of water such as pasteurization of food items.
- Temperature-Critical Product Shipping and Storage, such as Fresh Produce, Pharmaceuticals, and Blood Products.

