

## Product sheet Verdict® 4K: T datalogger

The Verdict® 4K: T temperature loggers 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 1s to 273hrs 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 4K: T 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 4K: T 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 4K: T to be mounted on almost any object, including containers, pallets, and bags.

### Key Features:

- Automatically Wakes up, Measures Temperature and Stores Values in 8kB of Datalog Memory in 8- or 16-Bit Format
- Digital Thermometer Measures Temperature with 11-Bit (0.0625°C) Resolution
- Accuracy of ±0.5°C from -10°C to +65°C, with Software Correction
- Water resistant or waterproof if placed inside DS9107 iButton capsule (Exceeds Water Resistant 3 ATM requirements)
- Sampling Rate from 1 min. up to 255 min.
- Programmable Recording Start Delay After Elapsed Time or Upon a Temperature Alarm Trip Point
- 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 Plus 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: -40 to +85°C



### Applications / Uses

- Environmental and Thermal Management Systems HVAC
- Human and Animal Temperature Monitoring
- Monitoring of refrigeration systems
- Temperature-Critical Product Shipping and storage, such as Fresh Produce, Pharmaceuticals, and blood products.