

USB-RTD223-CAL



Product Description

RTD223: Connect any Pt-100 RTD sensor to an USB port with this adapter to measure a very wide range of temperatures with precision.

This USB-connected resistance temperature detector (RTD) supports all PT100 2- or 3-wire sensor probes. The sensor wires are secured using the terminal screws of the RTD223 for a robust installation. Thanks to its 18-bit precision electronics, small variations in temperature can be detected. This makes the RTD223 suitable for a wide range of applications. The RTD223 is designed as a compact key form factor for easy integration even in space-constrained applications. The unique serial number assigned to each unit enables data traceability and certification. Multiple units may be simultaneously connected and operational on the same USB HUB or computer.

Specifications

Temperature

- Temperature range: -200°C to 800°C ^[2]
- ADC resolution: 18-bit
- Resolution: Typically 0.02°C
- Precision: $\pm 0.06^{\circ}\text{C}$ or better^[3]
- Sensing Element Type: 2 or 3 wire RTD 100 Ω sensors (Pt100 type)
- Connector: 3-screw terminal for robust connection
- Maximum wire size: 26 AWG to 20 AWG
- Long term stability

Miscellaneous

- Enclosure operating temperature: -20°C to 70°C
- Enclosure: ABS Plastic, USB-key form factor
- Communication: USB 2.0

Available channels

(As displayed in our logging software *DracalView*)

Channel Id	Description	Type	Nature
00	PT100 Temperature sensor	Temperature	Real

Free data logging software

- Real-time on-screen graphing and logging
- Supported by our DracalView data logger software and tools
- Operates under **Windows** (XP, Win7/8/10 64&32-bit), **Mac OS X** and **Linux**
- Configurable log file format with log interval down to 1 second
- Configurable units (°C, °F, K...)
- Simultaneous use of an unlimited ^[2] Dracal sensors supported
- Command-line tool [dracal-usb-get](#) also available (packaged with DracalView)
- Use it in your own application easily! We provide [code samples](#) for many programming languages
- Usable with LabView^[†] ([Guide here](#))
- And much more! Visit our [DracalView data logger](#) WEB page for more information

[Dracal RTD223 Datasheet](#)