

USB TC-08 Specifications

| USB TC-08 Thermocouple Data Logger general specifications | |
|---|--|
| Number of channels (single unit) | 8 |
| Maximum number of channels (using up to 20 TC-08s) | 160 |
| Conversion time | 100 ms per thermocouple channel + 100 ms for cold junction compensation (CJC can be disabled if all channels used as voltage inputs) |
| Temperature accuracy | Sum of $\pm 0.2\%$ of reading and $\pm 0.5\text{ }^{\circ}\text{C}$ |
| Voltage accuracy | Sum of $\pm 0.2\%$ of reading and $\pm 10\text{ }\mu\text{V}$ |
| Overvoltage protection | $\pm 30\text{ V}$ |
| Maximum common-mode voltage | $\pm 7.5\text{ V}$ |
| Input impedance | $2\text{ M}\Omega$ |
| Input range (voltage) | $\pm 70\text{ mV}$ |
| Resolution | 20 bits |
| Noise-free resolution | 16.25 bits |
| Thermocouple types supported | B, E, J, K, N, R, S, T |
| Input connectors | Miniature thermocouple |

| PC requirements | |
|-----------------|--|
| Minimum | <p>Processor, Memory, Free disk space: As required by the operating system</p> <p>Operating system: Microsoft Windows 7, 8 or 10, 32-bit and 64-bit versions; macOS 10.9 (Mavericks) or later, 64-bit only; Linux*, 64-bit only</p> <p>Ports: USB 1.1</p> |

* PicoLog 6 for Linux is distributed as an AppImage, so you can install it without superuser permissions: see appimage.org for further information. The software has been tested on Red Hat, OpenSUSE and Ubuntu.

| Environmental |
|---------------|
|---------------|

| Environmental | |
|--|----------------------------|
| Operating temperature | 0 to 50 °C |
| Operating temperature for stated accuracy | 20 to 30 °C |
| Operating humidity | 5 to 80 %RH non-condensing |
| Storage humidity | 5 to 95 %RH non-condensing |
| Water resistance | Not water-resistant |

| Physical properties | |
|----------------------------|---|
| Dimensions | 201 x 104 x 34 mm (7.91 x 4.09 x 1.34 in) |

| Software | |
|---------------------------------|--|
| PicoLog for Windows | <p>PicoLog data acquisition software can collect up to 1 million samples. Features include:</p> <p>Multiple views — view data as a graph, spreadsheet or text</p> <p>Parameter scaling — convert raw data into standard engineering units</p> <p>Math functions — use mathematical equations to calculate additional parameters</p> <p>Alarm limits — program an alert if a parameter goes out of a specified range</p> <p>IP networking — transfer measurements via a LAN or over the Internet</p> <p>Operating systems supported — Microsoft Windows XP (SP3) to Windows 10. Not Windows RT.</p> |
| PicoLog languages | <p>Full support for: English, Français, Deutsch</p> <p>Menus and dialogs only for: Italiano, Español, Svenska</p> |
| Software Development Kit | Includes example code |
| Optional free software | Drivers for Linux and macOS |

| Documentation languages | |
|--|---|
| <p>User's guide</p> <p>Programmer's guide</p> <p>Installation guide</p> | <p>English</p> <p>English</p> <p>English, Français, Deutsch, Italiano, Español, Svenska, Nederlandse, Dansk</p> |

| General | |
|---------------------------------------|--|
| Additional hardware (supplied) | USB 2.0 cable, user manuals |
| PC interface | USB 1.1 |
| Power requirements | Powered from USB port |
| Compliance | European EMC and LVD standards FCC Rules Part 15 Class A |
| Total satisfaction guarantee | In the event that this product does not fully meet your requirements you can return it for an exchange or refund. To claim, the product must be returned in good condition within 14 days. |
| Warranty | 5 years |

TC-08 resolution

| Thermocouple type | Overall range °C | 0.1 °C resolution | 0.025 °C resolution |
|-------------------|------------------|-------------------|---------------------|
| B | 20 to 1820 | 150 to 1820 | 600 to 1820 |
| E | -270 to 910 | -270 to 910 | -260 to 910 |
| J | -210 to 1200 | -210 to 1200 | -210 to 1200 |
| K | -270 to 1370 | -270 to 1370 | -250 to 1370 |
| N | -270 to 1300 | -260 to 1300 | -230 to 1300 |
| R | -50 to 1760 | -50 to 1760 | 20 to 1760 |
| S | -50 to 1760 | -50 to 1760 | 20 to 1760 |
| T | -270 to 400 | -270 to 400 | -250 to 400 |