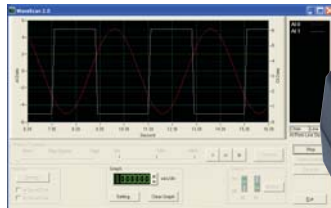


# USB-4718 8-Channel Thermocouple Input USB Data Acquisition Module



Basic Unit  
**\$325**



Windows software displays data in graphical or tabular format.

USB-4718, \$325, shown smaller than actual size.



- ✔ Supports USB 2.0
- ✔ Portable
- ✔ Bus-Powered
- ✔ 8 Differential Analog Input Channels
- ✔ 16-Bit Resolution
- ✔ 8 DI/8 DO
- ✔ Wiring Terminal on Modules
- ✔ Suitable for DIN-Rail Mounting
- ✔ Lockable USB Cable for Rigid Connection

The USB-4700 series consists of true Plug & Play data acquisition devices. No more opening up your computer chassis to install boards—just plug in the module, then get the data. It's easy and efficient.

The USB-4718 offers 8 thermocouple inputs with 16-bit resolution, up to 0.1% input range accuracy, or 4 to 20 mA inputs. Reliable and rugged enough for industrial applications, yet inexpensive enough for all types of projects, the USB-4718 is the perfect way to add measurement and control capability to any USB capable computer.

The USB-4718 is fully USB plug and play and easy to use. It obtains all required power from the USB port, so no external power connection is ever required.

Data collection is simple. Simply plug the data acquisition module into an available USB port and our easy-to-use Windows software does the rest. The software converts your PC into a real-time strip chart recorder. Data can be printed in graphical or tabular format. It can also be exported to a text or Microsoft Excel file.

## Specifications

### ANALOG INPUT

**Accuracy:** ±0.1% for voltage input  
**Bandwidth:** 13.1 Hz @ 50 Hz, 15.72 Hz @ 60 Hz  
**Channels:** Eight differential  
**Ch. Independent Conf:** Yes  
**CMR @ 50/60 Hz:** 92 dB min  
**Resolution:** 16-bits  
**Input Impedance:** 20 MΩ  
**Input Range:** 0 to 15 mV, 0 to 50 mV, 0 to 100 mV, 0 to 500 mV, 0 to 1V, 0 to 2.5V, 0 to 20 mA, 4 to 20 mA  
**Input Types:** Thermocouple, mV, V, mA

### Sampling Rate:

10 samples/sec (total)  
**Span Drift:** ±25 ppm/°C  
**TVS/ESD Protection:** Built-in  
**Zero Drift:** ±3 μV/°C

### ISOLATED DIGITAL INPUT

**Channels:** 8  
**Input Voltage:**  
**Logic 0:** 2V max  
**Logic 1:** 5V min (30 V max)  
**Isolation Protection:** 2500 Vdc  
**Opto-Isolator Response:** 25 μs

### ISOLATED DIGITAL OUTPUT

**Channels:** 8  
**Output Type:** Sink (NPN)  
**Isolation Protection:** 2500 Vdc  
**Output Voltage:** 5 to 30 Vdc, 1.1 A max/total  
**Sink Current:** 200 mA max/channel  
**Opto-isolator Response:** 25 μs

### GENERAL

**Bus Type:** USB 2.0  
**Software:** Windows 2000/XP  
**I/O Connector:** Onboard screw terminal  
**Dimensions:**  
 80 H x 132 L x 32 mm D  
 (3.1 x 5.2 x 1.3")  
**Power Consumption:**  
 100 mA @ 5V  
**Power Input:** 5V from USB line  
**Watchdog Timer:** 1.6 sec (system)  
**Operating Temperature:**  
 0 to 60°C (32 to 140°F)  
**Storing Temperature:**  
 -20 to 70°C (-4 to 158°F)  
**Storing Humidity:** 5 to 95% RH non-condensing

Thermocouple Ranges and Accuracy			
Thermocouple	Input Range	Typical Accuracy	Maximum Error
J	0 to 760°C (32 to 1400°F)	±1.0°C	±1.5°C
K	0 to 1370°C (32 to 2498°F)	±1.0°C	±1.5°C
T	-100 to 400°C (-148 to 752°F)	±1.0°C	±1.5°C
E	0 to 1000°C (32 to 1832°F)	±1.0°C	±1.5°C
R	500 to 1750°C (932 to 3182°F)	±1.2°C	±2.5°C
S	500 to 1750°C (932 to 3182°F)	±1.2°C	±2.5°C
B	500 to 1800°C (932 to 3272°F)	±2.0°C	±3.0°C

Note: Due to the location of the CJC sensor, the measurement will have a 1°C maximum difference in channels.

**AVAILABLE FOR FAST DELIVERY!**

## To Order (Specify Model Number)

Model No.	Price	Description
USB-4718	\$325	8-channel thermocouple input USB module

Comes with Windows Software and complete user manual on CD, a 1.8 m (6') USB 2.0 cable, and DIN rail mounting kit.

**Ordering Example:** USB-4718, 8-channel thermocouple input USB module, and OMEGACARE<sup>SM</sup> 1-year extended warranty for USB-4718 (adds 1 year to standard 1-year warranty), \$325 + 32 = \$357.



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