TEMPERATURE DATA ACQUISITION - THERMES USB

- **Turns any PC into a precision thermometer**

- **1 to 7 channels**

- **±0.1°C stability & clinical accuracy**

- **0.01°C Resolution**

- **Reads up to 16 measurements per second**

- **Input isolation for low leakage**

THERMES-Temperature Data Acquisition System with optional laptop computer

Physitemp's original Thermes high accuracy ISA based data acquisition system has been redesigned to create a more versatile USB model. The new system requires no internal connections to your computer and simply connects via an external USB port on your laptop or desktop computer. Two versions of the data acquisition system are available. The standard version, *THERMES USB*, is connected to your computer USB port. The wireless version - *THERMES USB WFI*, can be either directly connected to a USB port or, with the included wireless receiver, positioned up to 100 feet from the host computer.

Each unit will accomodate up to 7 type T thermocouple sensors and multiple Thermes units may be connected to the same computer for more thermocouple inputs. A high accuracy electronic cold junction compensation circuit maintains typical system accuracy of ±0.2°C over an ambient temperature range of 15 to 35°C. Individual offsets may be added to each input in software to facilitate individual calibration of each channel.

For information on our wide selection of Type T Thermocouple temperature probes visit our website at www.physitemp.com

SPECIFICATIONS

Accuracy:	±0.1°C, ±0.2% of reading over ambient range, 15 to 35°C
Stability:	±0.1°C
Resolution:	0.01°C
Range:	-100 to +400°C
Inputs:	7 sub-miniature Type T thermocouple sockets
Speed:	16 measurements per second maximum
Output:	User selectible display formats, analog or digital readout, real-time graphics, ASCII-text file
Display:	Celsius, Fahrenheit and Kelvin scales, Differential, MinMax & Normal modes. Alarm thresholds independently configurable for all channels
Dimensions:	9½" L x 6½" W x 1½" H
Weight :	0.7 Kg or 1.5 lbs.
Power Supply:	5 volts DC at 100 mA, powered by host computer or external supply
Requirements:	Pentium class computer running Windows XP, 2000, 7 or 8 10MB hard drive space, CD-Rom drive and one open USB port.
Interface:	USB 2.0 (backwards compatible with USB 1.1)

(left to right) THERMES-USB WFI - WirelessTemperature Data Acquisition System with optional battery pack, wireless receiver and optional laptop computer

BP-1 Li-Ion Battery Pack

The model BP-1 Li-Ion battery pack is designed for use with the THERMES USB and THERMES USB WFI Type T temperature data acquisition systems. It allows the data acquisition system to be operated for up to 100 hours continuously without any additional power source.

The BP-1 provides either 16V, 19V or 5V DC output to run either the THERMES or a laptop for an extended period of time. The power supply has a capacity of 130 watt hours allowing the THERMES to operate for up to 100 hours continuously. Operating time with a laptop will vary from 3-4 hours in addition to the laptops fully charged normal running time. The BP-1 may also be used with our OPT-1, opto-isolator cable with the adaptor cable provided. A charge level indicator comprising four LEDs indicate remaining battery life.

The THERMES USB WFI is a Type T Thermocouple data acquisition system with a secure 2.4GHz wireless link to its host computer. Specifications for the device are the same as the THERMES USB except for its wireless capability. The THERMES USB WFI includes a wireless receiver that is connected to the host computer via a USB port. All communications between the host computer and THERMES pass through this device. The THERMES USB WFI may be connected directly to the host computer via a standard USB port (from which it also draws its power) or operated remotely from the BP-1 battery pack. A wall mounting USB power supply is also provided with THERMES USB WFI.

OPT-1 Optical Link

A 10 meter optical cable is available with built in transmitter and receiver to allow the THERMES USB to be operated in full optical isolation from the host computer. A medical grade isolated power supply is provided to power the optical transmitter and THERMES data acquisition system when used with this cable. Alternatively, a rechargeable Lithium Ion battery pack, the BP-1, is available to maintain the THERMES-USB or THERMES-USB WFI totally isolated from the AC supply.
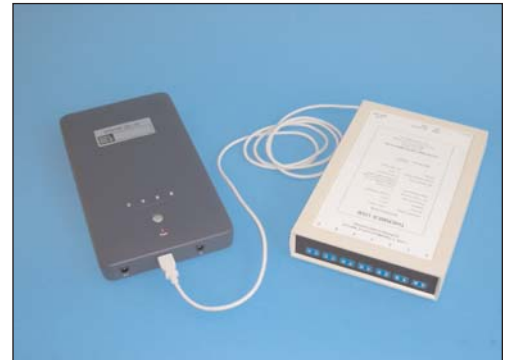
Operating Software

For customers who already have Labview or Dasylab no additional software is necessary. Recommended operating software is Dasylab Lite version 9.01. The Lite version provides all the necessary functions to display and store temperature data in digital and graphical formats in real time. Users may customize the display to suit their particular application. The Dasylab Basic version provides additional features for data manipulation and statistical analysis.

10 meter USB optically isolated interface with medical grade power supply

Order by Part Number below

THERMES USB (3 foot USB Cable Supplied)
THERMES USB WFI (includes wireless gateway)
THERMES USB RF
OPT-1 USB Optical Isolation Link
DASYLAB Lite Software
DASYLAB Basic Version Software
BP-1 THERMES Li-Ion Battery Pack