

DexTemp™ 1000

Non-Contact Infrared Temperature Monitor

Product Highlights

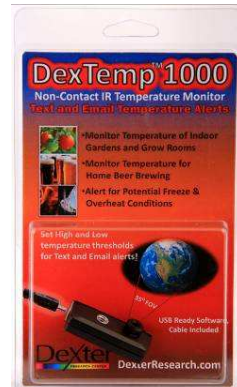
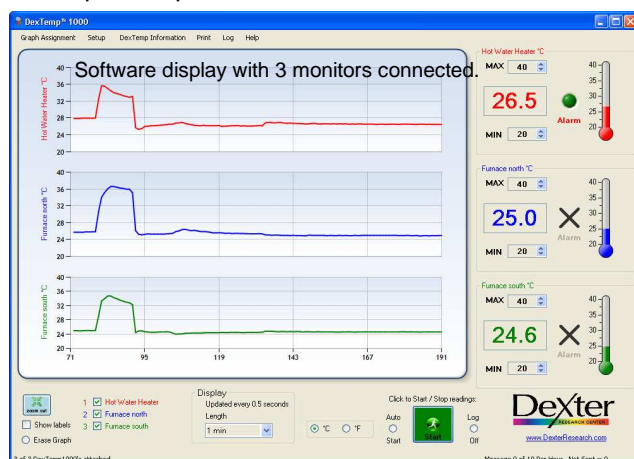
The Dexter Research Center DexTemp™ 1000 temperature monitor is a small, economical, calibrated alerting thermometer. This device is used for monitoring the temperature of objects using non-contact infrared technology.

The DexTemp™ 1000 works in conjunction with Windows® based computers and is powered by the computer's USB port. The easy to install software features real-time temperature plots and user defined over and under temperature alert thresholds that can notify the user with audible and visual alerts on the computer, as well as SMS text and Email alerts when a threshold is exceeded. The software also allows temperature history logging on the computer.

The DexTemp™ 1000 is based on Dexter's leadership in infrared thermopile technology and supports easy set-up to measure the temperature of an object without contact.

Applications

- Monitor Temperature of Indoor Gardens and Grow Rooms
- Monitor Temperature for Home Beer Brewing and fermentation
- Alert for potential Freeze or Overheat conditions
- Liquid temperature measurement



Features

- Non-contact Infrared temperature measurement range: -4°F to 716°F (-20°C to 380°C)
- Display and Plot up to three DexTemp™ 1000 temperature monitors on one computer
- Automatically send Text/Email temperature Alerts when user defined High and Low temperature Alert thresholds exceeded
- Text/Email notification when temperature returns within threshold
- Settable "time threshold exceeded" before Alert
- Audible and visual alarms on computer
- Temperature measurements 2 times per second
- Temperature displayed in degrees Fahrenheit or Celsius
- Temperature data logging stored on computer for future retrieval and analysis
- Economical, low cost, with no monitoring fees (standard text messaging rates may apply)
- Easy software installation and set-up
- User assignable monitor names
- Standard tripod mount (1/4"-20 threaded hole)
- Small sensor size 1.8"x0.8"x0.75"
- 35° FOV (Field of View)
- Automatic restart after power outage (requires additional computer Bios set-up)
- Operates with Windows® XP, Windows® 7, or Windows® 8 operating systems.



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Technical Specifications

Specifications apply at 23°C, Object emissivity >0.95, 2 minute warm-up, <95% Relative Humidity non-condensing

Parameter	Min	Typical	Max	Symbol	Units	Comments
Ambient Operating Temperature	-20		60	T _a	°C	-4° to 140°F
Object Temperature Range	-20		380	T _o	°C	-4° to 716°F
Object Temperature Accuracy T _o : 0° to 200°C T _o : -20° to -1°C and 201° to 380°C		+/-2°C or 2% of T _o +/-5°C or 5% of T _o			°C or %	Whichever is greater
Object Temperature Measurement Repeatability		+/-1			°C	
Field of View		35°		FOV	Degrees	See Drawing below for FOV Definition
Package connector		Micro USB type B female				USB 2.0
Package Type		USB Flash Drive				1.8" x 0.8" x 0.75" (4.6cm x 2.0cm x 1.9cm)

All accuracy specifications apply to settled isothermal conditions. The accuracy data are only valid if the object fills the sensor FOV completely.

Maximum Ratings

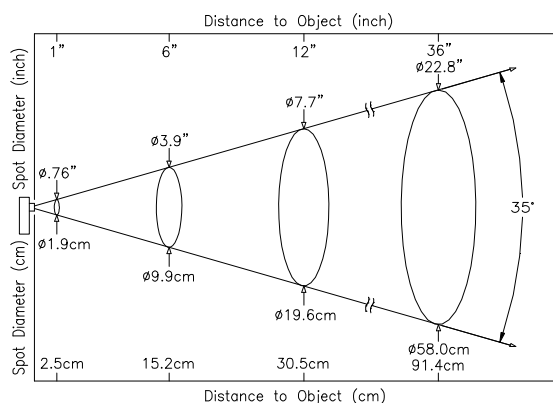
Parameter	Value
Supply Voltage (over voltage)	USB 5.5V
Supply Voltage (operating)	5.0 +/-0.25V
Operating Temperature Range	-20 to +60°C
Storage Temperature Range	-20 to +60°C
ESD Sensitivity (EN 61000-4-2 compliant, pursuant to IEC EN 55204:2010)	+/-4kV direct +/-8kV in Air
USB Cable Length (single cable)	9.8 feet (3m)
Exceeding the absolute maximum ratings may affect device reliability and/or cause permanent damage.	

Package Includes

- DexTemp™ 1000 temperature monitor
- Mini-DVD ROM with DexTemp™ 1000 temperature monitor software for Windows® and User Manual in PDF format
- USB cable, 3 feet (0.91m)

Not designed for applications involving personal health, public safety, or other applications more suited to other instruments. For more information, please visit DexterResearch.com/DexTemp1000

FOV and Distance to Spot Size



The DexTemp™ 1000 temperature monitor measures the average temperature of all objects in the FOV spot area. To accurately measure the temperature of an object, the object must fill the FOV spot area.

For more information about other Dexter Research products, please visit DexterResearch.com



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