

VIR50 Digital InfraRed Video

**Thermometer** 





Large 2.2" color video LCD displays measurement area with temperature, humidity, min/max/avg, date, and time stamp. Upload images and videos to a PC or laptop for further analysis or use for report documentation



## The Issue

In many jobs, across industries, documenting problems is almost as important as diagnosing them. If you find a problem, but can't effectively report and escalate it in a compelling way to a client or a key decision-maker who must authorize repairs, you could consider yourself part of the problem.

A picture is worth a thousand words the most important of which is "Approved." Documentation and reporting is invaluable for chronicling repairs. Photos and video help convey and illustrate the extent of problems that are found. Oftentimes, decision-makers don't know the affected equipment as well as you. Presenting a picture with critical readings, or a report with supporting diagnostic information, can lead to a quick "Yes" so that parts are authorized for purchase and repairs are made promptly.

Plus, from a liability perspective, having a detailed account of problems that are discovered can protect an organization by demonstrating sustained efforts to maintain equipment for safety, productivity, and up-time.

Let's look at two examples where problems benefit from visually compelling documentation:

Your steel forge temperature may not be accurate and you need a way to check if the temperature control setting matches the actual measured temperature. Multiple readings have to be taken and documented.

Moisture is being trapped under your paint application causing premature failure. To prevent condensation from forming, Surface Temperature of the area to be painted has to be at least 5°F higher than the Dew Point, and Humidity should be <70%. You need an instrument that can measure and record Surface Temperature, Relative Humidity and Dew Point plus, provide a clear picture of when and where the measurements were taken.

## The Solution

To improve and enrich diagnostic documentation, take a closer look at the new Extech VIR50 IR Video Thermometer. The innovative, new instrument is a camera-thermometer hybrid that is designed to measure key parameters while functioning as a digital camera that captures photos and video. Readings are displayed on the large preview display and are imprinted on images and video much like a familiar time/date stamp, for easy reference.

Features include a 640x480px resolution camera and a 2.2" Color TFT LCD that displays the measurement area along with a choice of readings: Temperature/Humidity or Dew Point/Wet Bulb, Min/Max/Average/Differential, Date, and Time Stamp.

The VIR50 includes a microSD card for storing still images (JPEG) and video (3GP). The SD format makes it easy to transfer files to your PC or laptop for further analysis or for incorporating into report documentation for clients or managers. Images and video can also be uploaded to your PC via USB. The VIR50's 50:1 distance to target ratio ensures safe measurements from a distance while dual converging laser pointers help you find the ideal distance for a 1" target spot.

A fast 150 millisecond response time accelerates measurements and a color LED bargraph helps identify viewing trends. Adjustable emissivity increases measurement accuracy for different surfaces, and adjustable High/Low set points with audible alarm alerts you when temperatures exceed user-defined set points. For extended monitoring, the VIR50 can be mounted on a tripod and the trigger can be locked in the ON position to enable continuous unattended readings.

The VIR50 comes complete with microSD card, general purpose Type K bead wire probe, USB cable, rechargeable 3.7V battery, and carrying case.

## **Specifications**

Laser Convergence Distance	50" (127cm)
IR Temperature Range	-58 to 3992°F (-50 to 2200°C)
Repeatability	±0.5% or 0.9°F/0.5°C
Basic Accuracy	±(1% of rdg + 4°F/2°C) (31 to 212°F)
Max resolution	0.1°F/°C
Emissivity	0.10 to 1.00 Adjustable
Field of View (Distance to Target)	50:1
Type K Temperature Range	-58 to 2498°F (-50 to 1370°C)
Air Temperature Range	32 to 122°F (0 to 50°C)
Relative Humidity	0 to 100%RH
LCD Display	2.2" TFT 320 x 240 pixels
Camera	640 x 480 pixels
Dimensions	8.1 x 6.1 x 2.4" (205 x 155 x 62mm)

## **Ordering Information:**

VIR50......Dual Laser Video IR Thermometer

VIR50-NISTL\*.....VIR50 with Certificate of Traceability to NIST

BATT-37V......Rechargeable 3.7V battery

\*VIR50-NISTL - Limited NIST for Certificate of Traceability to Type K and max IR Temperature of 1500°F (815°C)

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