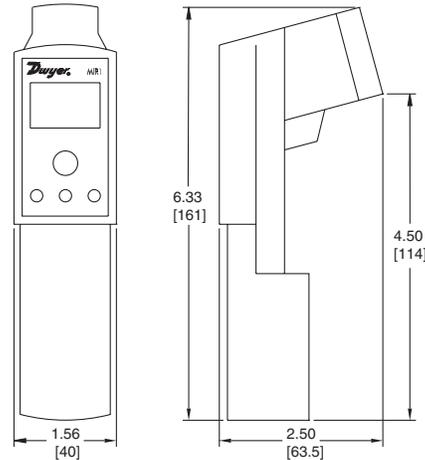




MODEL MIR1 INFRARED THERMOMETER

Specifications– Installation and Operating Instructions



DESCRIPTION

Infrared thermometers sense the energy of an object, which consists of transmitted energy, emitted energy, and reflected energy. An infrared thermometer's lens, pointed at an object, collects and focuses the energy onto the infrared detector inside the unit producing a signal that is translated and displayed on the LCD.

For most applications, objects being measured have high emissivities (painted, worn, or oxidized metals, plastics, rubber, paper). The MIR1 infrared thermometer has a fixed emissivity set at 0.95. See table 1 for emissivity values for various materials.

OPERATION

Turn the unit on by pressing the ON/HOLD button. The meter automatically turns off approximately 5 seconds after the ON/HOLD button is released.

Press the ON/HOLD button to take readings. Read the temperature on the LCD.

Select temperature units ($^{\circ}\text{F}$ or $^{\circ}\text{C}$) by first pressing and holding the ON/HOLD button and then pressing the C/F button momentarily until the desired units are shown on the LCD. The units character will blink on the LCD while programming. Release all buttons when completed.

The MIR1 automatically holds the last temperature reading on the LCD for five seconds after the MEASURE button is released. No extra button presses are necessary to freeze the displayed reading.

To turn on the LCD backlight, press and hold the ON/HOLD button and press the BACKLITE button. Repeat this procedure to turn the backlight off.

PHYSICAL DATA

Range: 0 to 600 $^{\circ}\text{F}$ (-20 to 315 $^{\circ}\text{C}$).

Accuracy: $\pm 2\%$ of reading or $\pm 4^{\circ}\text{F}$ ($\pm 2^{\circ}\text{C}$) whichever is greater.

Resolution: 1 $^{\circ}\text{C}/\text{F}$.

Sample Rate: 1 second, approximate.

Distance-to-Target Size Ratio: 6:1, nominal.

Response Time: 0.5 seconds.

Emissivity: Fixed at 0.95.

Ambient Operating Temperature: 32 to 122 $^{\circ}\text{F}$ (0 to 50 $^{\circ}\text{C}$), 80% RH max.

Display: 3-digit.

Power: one 9V alkaline (included) .

Power Current: 12 mA DC, approximate.

Weight: 6.4 oz (200 g).

To turn on the laser, press and hold the ON/HOLD button and press the LASER button. Repeat this procedure to turn the laser off.

To take temperature measurements, simply hold the unit by the handle and point the sensor toward the object to be measured. The object should be larger than the target size calculated using a 6:1 distance-to-target-ratio or on the chart located on the top of the instrument.

The meter automatically compensates for temperature deviations from ambient temperature. Keep in mind it will take up to 30 minutes to adjust to wide ambient temperature changes.

When low temperatures are to be measured followed by high temperature measurements, some time (several minutes) is required before the high temperature measurements can be made accurately.

