# **Digital Infrared Thermometers**





#### **FEATURES**

- MINITEMP 24B1 Hand held measuring device for non contact temperature measurement
- Integrated LC-Display, LOW-Bat., HOLD-function.

#### TECHNICAL SPECIFICATION

Optical resolution : 8/1 (distance/spot size)
Spectral range : 8....14 um (universal)

Resolution :  $0.2 \, ^{\circ}\text{C}$  or  $0.5 \, ^{\circ}\text{F}$  ( $^{\circ}\text{C}$  /  $^{\circ}\text{F}$  switchable) Accuracy :  $+/-2 \, ^{\circ}\text{C}$ 

Emissivity : 0.95 (pre-set)
Power supply : 9V block battery

dimensions/weight : 152x101x38mm / 227g incl. battery

#### FEATURES

- SEMITEMP 6080 Hand held measuring device for non contact temperature measurement
- Integrated LC-Display, LOW-Bat., HOLD-function, maximum-minimum-data-store
- Backlight, laser ON/OFF, rubberized casing, tripot mount
- Indication of average and difference, LO- and HI-Alarm (buzzer)
- Internal date store for 12 measuring values, LOCK-function
- Connection for external sensor Pt 1000/2 wire

#### TECHNICAL SPECIFICATION

Measuring range : -32....600 °C (Model A1) -32....760 °C (Model B1) : -32....760 °C (Model B1-IS)

(IS-intrinsically safe)

Sight : Spot-laser

Optical resolution : 30/1 (distance/spot size) (Model A1)

50/1 (distance/spot size) (Model B1)

Resolution :  $0.1 \,^{\circ}\text{C} \, (^{\circ}\text{C} \, / ^{\circ}\text{F switchable})$ Accuracy :  $+/-1 \,^{\circ}\text{M} \, \text{of reading or } +/-3 \,^{\circ}\text{C}$ 

Emissivity : 0.30...1.00 adjustable Power supply : 9V block battery

Dimensions/weight : 195x135x40mm / 320g incl. battery

Complete with arm strap and service/transport case Model A1 (-32...600 °C, with point-laser, 30/1) Model B1 (-32...760 °C, with point-laser, 50/1)

(ii) Model BI-IS (-32.. 760° C, with point laser, 50/1 (Intrinsically

Safe)

#### **FEATURES**

- > SEMITEMP 2030B2 Hand held measuring device for non contact temperature measurement
- Integrated LC-Display, LOW-Bat., HOLD-function, max-data-store
- Backlight, laser ON/OFF, rubberized casing, tripod mount

#### **TECHNICAL SPECIFICATION**

Measuring range : -32....535 °C Sight : 2-point-laser

Optical resolution : 16/1 (distance/spot size)

Spectral range : 8....14 um (universal)

Resolution : 0.2 °C (°C / °F switchable)

Accuracy : +/- 1 % of reading or +/- 3°C

Emissivity : 0.95 (pre-set)

Power supply : 9V block battery

dimensions/weight : 195x135x40mm / 320g incl. battery

Complete with arm strap and service/transport case



Semi Temp 6080 Series

An intrinsically safe infrared thermometer is meant for use in highly explosive atmospheres containing vapours of highly inflammable materials/gases like petroleum, methane, LPG (Liquified Petroleum Gas), aviation turbine fuel vapours etc. This instrument is provided with all the necessary safe guards to protect the environment from sparks or electrical discharges.



# **Digital Infrared Thermometers**

#### DESCRIPTION

Vaiseshika offers range of Infrared thermometers which have been designed to meet the industrial calibration requirements and temperature measurement needs at competitive cost. The instruments are hand held, compact, rugged and portable.

When it comes to temperature measurement technique where a combination of simplest control and high measurement accuracy is required, infrared thermometers will always be the first choice.

Infrared thermometers allow users to measure temperature in applications where conventional sensors cannot be employed. Specifically, in cases dealing with moving objects (such as rollers, moving machinery, or a conveyer belt), or where non contact measurements are required because of contamination or hazardous reasons (such as high voltage), where distances are too great, or where the temperatures to be measured are too high for thermocouples or other contact sensors.

The critical considerations for any infrared thermometer include field of view, type of surface being measured, and spectral response. Other considerations include response time, environment, mounting limitation, viewing port or window applications, and desired signal processing.



Maxi Temp 24

#### FEATURES (MAXI TEMP 24A3)

- Graphic display for 10 measurement results
- Integrated LCD, LOW battery and HOLD function
- Max datas tore, back light and laser ON/OFF.
- Intrinsically safe version available
- Indication of average and difference, LOW and HIGH alarm

#### TECHNICAL SPECIFICATION

Measuring Range : -30...900° C Sighting 3 point-circle-laser 60/1 (distance/spot) Optical resolution adjustable 0.10 ... 1.00 Emissivity

0.1°C Resolution

Accuracy +/-0.75% of reading or  $+/-1^{\circ}$  C Temperature Units °C, °F (can be switched)

: 2x1.5 V battery Power supply Dimensions  $200\times170\times50\,\text{mm}$ 

Weight 480 g

Standard equipment: Maxi Temp. 24 with graphical display

- Hand Held measuring device for non contact Temperature measurement, integrated LCD-Display.
- Low-Bat. Hold function.
- Maximum data store, backlit, laser ON/OFF

FEATURES (MAXITEMP 24B3+)

- Graphic display for 10 measurement results, tripod mount.
- Clock/date indication of average and difference, Lo and Hi alarm
- Internal data store for 100 measuring values.
- Connection for external sensor type K, J or NTC
- Output: Serial interface RS 232 and 1 m V/degree C

#### **TECHNICAL SPECIFICATION**

Measuring Range : -30...900°C Sighting 3-point-circle-laser **Optical resolution** 60/1 (distance/spot size)

Serial interface RS 232 and 1 mV/  $^{\circ}$ C Output

Resolution 0.1 degree C

Accuracy +/-1% of reading or  $+/-2^{\circ}$  C

**Emissivity** 0.1... 1.00 adjustable, internal material list for

**Emissivity** 

Temperature Units °C/° F (switchable)

2 x 1.5 V battery and 7.5 VDC power supply Power supply

Dimensions 200 x 170 x 50 mm 480 g inclusive battery Weiaht

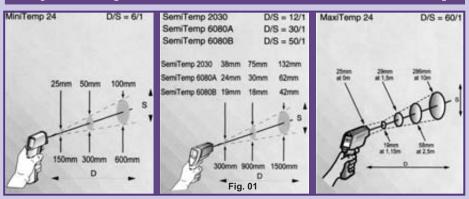
Complete with arm strap and service / transport case, Data cable, software, mains adapter and sensor

### INTRINSICALLY SAFE VERSION MAXI TEMP 24A3 IS ALSO AVAILBALE.



An intrinsically safe infrared thermometer is meant for use in highly explosive atmospheres containing vapours of highly inflammable materials/gases like petroleum, methane, LPG (Liquified Petroleum Gas), aviation turbine fuel vapours etc. This instrument is provided with all the necessary safe guards to protect the environment from sparks or electrical discharges.

## Explanatory Information on Infrared Thermometry



### DESCRIPTION OF INFRARED THERMOMETRY (see Fig. 01)

'D' is the distance between the infrared thermometer and the object (whose temperature is to be measured). 'S' is the diameter of the circular light spot, which gives the user an estimate of the area whose temperature is sensed by the infrared Thermometer.

There is an inverse corelationship between the size of the diameter of light spot verses sensitivity i.e. more the size of the diameter, less is the sensitivity of the instrument and vice-versa.

But still the distance 'D'gives an estimate up till which a given Infrared Thermometer can work.