VOLTCRAFT®

VOLTCRAFT® - TOP PERFORMANCE IN EVERY WAY

"For more than 25 years, our product range has been dynamically adapting to the constant changes in the industry. We commit to offering first-class quality to our customers while delivering an excellent cost-performance ratio. This philosophy remains the cornerstone of Voltcraft's success."

IR 900-30S
INFRARED THERMOMETER
№ 10 09 20

CE

VERSION 09/09

This infrared thermometer is suitable for contactless temperature measurement and features extensive functions. Contact measurement is also available via K type thermocouple. This is particularly useful when the surface emissivity is unknown. As a special feature, the backlight of the LCD turns red if the measured temperature exceeds the adjusted threshold.

HIGHLIGHTS

Additional contact measurement function (K type) //

Optics 30:1 //

Measurement range -50 ºC to +900 ºC (-58 ºF to +1652 ºF) //

Data hold function //

Switchable target laser //

Hi/Lo alarm //

Settable degree of emission //

Memory for 20 measured values //

Min./max./Ø and differential display //

Permanent measurement function //

Automatic switch-off //

GENERAL SPECIFICATIONS

RESPONSE TIME: < 1 s **EMISSIVITY:** adjustable from 0.1 to 1.0 **BASIC ACCURACY:** ± 1.5 % **TEMPERATURE RANGE K TYPE:** -50 °C to +1370 °C (-58 °F to +2498 °F) **OPTICS:** 30:1 **POWER SUPPLY:** 9 V block battery **WEIGHT:** 290 g **DIMENSIONS (W x H x D):** 56 x 230 x 100 mm

TECHNICAL DATA

Spectrum:	8 - 14 µm
Resolution:	0.1 °C/°F
Laser:	Rated power < 1mW, laser class 2, Wave length 630 - 690 nm
Operating temperature:	0 °C to +50 °C / +32 °F to +122 °F
Operating humidity:	10 to 90 % RH
Storage temperature:	-10 °C to +60 °C / +14 °F to +140 °F
Storage humidity:	10 to 80 % RH

Accuracy (for ambient temperatures of 23 °C to 25 °C, emission level 0.95)

Temperature measuring range	Accuracy of IR measurement
-50 °C to +20 °C / -58 °F to +68 °F	± 3 °C / ± 5.4 °F
+20 °C to +500 °C / +68 °F to +932 °F	± 1.5 % of the measured value ± 1 °C / ± 1.8 °F
+500 °C to +900 °C / +932 °F to +1652 °F	± 2 % of the measured value

Temperature measuring range	Accuracy of contact temperature measurement (K type)
-50 °C to +1000 °C / -58 °F to 1832 °F	± 1.5 % of the measured value ± 3 °C / ± 5.4 °F
+1000 °C to +1370 °C / +1832 °F to 2498 °F	± 1.5 % of the measured value ± 2 °C / ± 3.6 °F

→ *The supplied K type wire sensor is suitable for temperature measurements of up to 200 °C / 392 °F . K type wire sensors which can cover the supported range up to 1370 °C / 2498 °F must be purchased separately.*

Surface emissivity

Measured surface	Emissivity
Asphalt	0.90 to 0.98
Brick	0.93 to 0.96
Cement	0.96
Ceramic	0.90 to 0.94
Charcoal (powder)	0.96
Chromium oxides	0.81
Cloth (black)	0.98
Concrete	0.94
Copper oxides	0.78
Glass	0.90 to 0.95
Human skin	0.98
Ice	0.96 to 0.98
Iron oxide	0.78 to 0.82

Measured surface	Emissivity
Lacquer	0.80 to 0.95
Lacquer (matte)	0.97
Lather	0.75 to 0.80
Marble	0.94
Mortar	0.89 to 0.91
Paper	0.70 to 0.94
Plaster	0.80 to 0.90
Plastic	0.85 to 0.95
Rubber (black)	0.94
Sand	0.90
Soil	0.92 to 0.96
Textiles	0.90
Water	0.92 to 0.96

→ *The emissivity values shown in the above table are approximate. Several parameters, e.g. geometry, surface quality, may affect the emissivity of an object.*

PACKAGE CONTENT

Infrared thermometer // K type wire sensor // 9 V block battery // Operating instructions

*02_09/09_02-SB