



RAYOMATIC USB

Non-contact thermometer with 4-20 mA output and USB communication



Rayomatic USB non-contact thermometer measures temperatures from -40°C to 1000°C and provides a linear 4 to 20 mA output. The signal is compatible with almost any indicator, controller, recorder, data logger etc., without the need for special interfacing or signal conditioning.

- 8 to 14 µm
- Two-wire 4-20 mA output
- Temperature range, emissivity setting... configurable by PC via IRConfig software and USB cable
- Emissivity from 0.1 to 1.0
- 15:1, 30:1 and CF optics
- OPC server capabilities
- Data acquisition, alarms and scrolling graphical display
- IP65 stainless steel housing

Description

Rayomatic USB non-contact thermometer measures temperatures from -40°C to 1000°C and provides a linear 4 to 20 mA output. The signal is compatible with almost any indicator, controller, recorder, data logger etc., without the need for special interfacing or signal conditioning.

The non-contact temperature sensor is suitable for most materials such as food, paper textilies, plastics, leather, tabacco, pharmaceutical, chemicals, rubber coal and asphalt.

Fully configurable by PC, Rayomatic USB is supplied with IRConfig software and USB cable. The emissivity and range can be set with the software or adjusted by OPC client. The sensor can be either connected with the 4-20 mA cable, the USB cable or both.

- 8 to 14 μm
- Two-wire 4-20 mA output
- Temperature range, emissivity setting... configurable by PC via IRConfig software and USB cable
- Emissivity from 0.1 to 1.0
- 15:1, 30:1 and CF optics
- OPC server capabilities
- Data acquisition, alarms and scrolling graphical display
- IP65 stainless steel housing

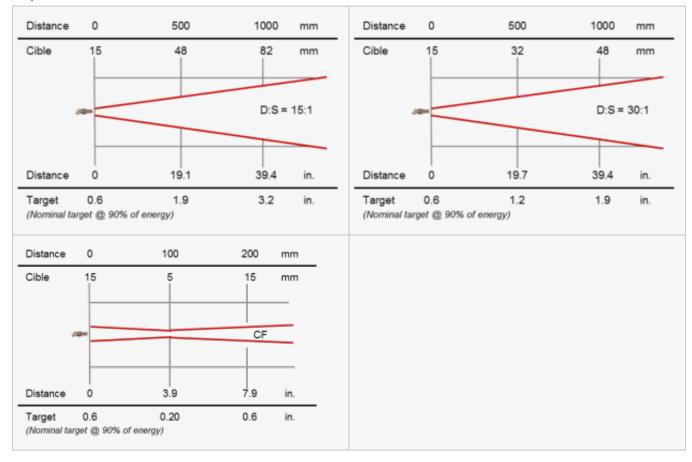


Specifications

Infrared temperature measurement

Temperature range	-40 to 1000°C
Spectral response	8 - 14 μm
Emissivity	Adjustable from 0.1 to 1.0
Accuracy	±1% RDG or 1°C
Repeatability	±0.5% RDG or 0.5°C
Response time	240 ms (90%)

Optics



Further features

Datalogging	Data acquisition, alarms and scrolling graphical display
Output	2-wire 4-20 mA



General specifications

Dimensions L x I x h	Electronic module: Ø 25 x 106.5 mm Thread mounting: M20 x 1 mm
Weight	175 g with cable
Construction	Stainless steel
Power supply	24 VDC (Max 28 VDC)
Sensor voltage	6 VDC Min
Loop impedance	900 Ω Max (4-20 mA OUT)
Interfaces	USB

Environmental specifications

Reference conditions	0°C to +70°C (95% non-condensing)
Environmental rating	IP65



Models and accessories

Instrument:

Ordering code structure: USB-AA-BB-C/MAN

Please select the required options from tables A, B... below to define the right device reference.

USB Rayomatic USB

Delivered in standard with:

IRConfig software

- USB cable
- Output cable
- Instruction manual in English

Table AA Optics - Distance to target

15 Optics 15:1, 48 mm @ 500 mm

30 Optics 30:1, 32 mm @ 500 mm

CF Close focus lens, 5 mm @ 100 mm

Table BB Accessories

NO None

WJ Air / Water cooled jacket and air purge collar

Table C Calibration certificate

0 None

1 Factory traceable calibration certificate with data

Accessories:

FBL Fixed mounting bracket for Rayomatic USB
ABL Adjustable mounting bracket for Rayomatic USB

APL Air purge collar for Rayomatic USB

PWL Protective plastic window in stainless steel holder

LSTL Laser sighting tool for RAYOMATIC USB

DLSBFL Dual laser sighting bracket, fixed, for RAYOMATIC USB
DLSBAL Dual laser sighting bracket, adjustable, for RAYOMATIC USB

DLSBCE Extended cable for Dual Laser Sighting Bracket - 1 m

PUCE Extended 4-20 mA output cable for uncooled Rayomatic USB, 1 m, up to 29 m

extension

PUCEHT Extended 4-20 mA output cable, high temperature, for cooled Rayomatic USB, 1

m, up to 29 m extension

CALCERT A Calibration certificate

CALCERT B Re-calibration and certificate