

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

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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.

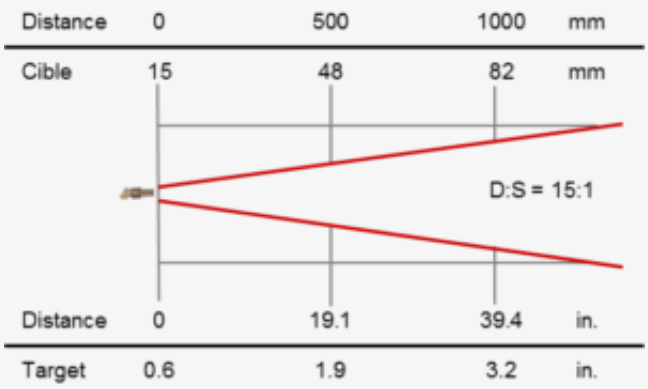
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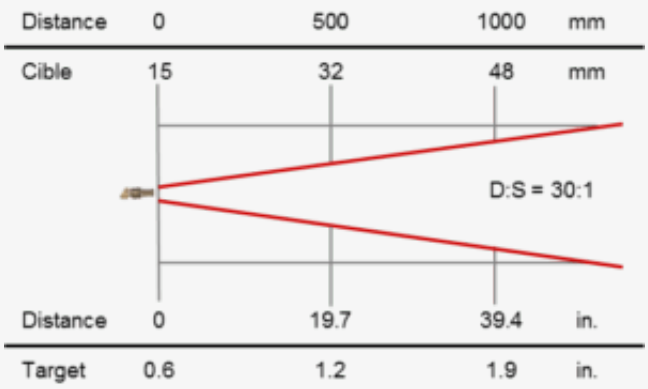
Specifications

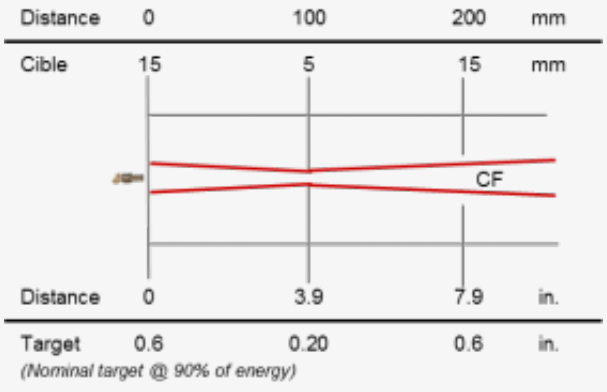
Infrared temperature measurement

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 l 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