

## 2.2 $\mu\text{m}$ process infrared thermometer with 4-20 mA output and USB communication

Rayomatic USB 2.2 non-contact infrared sensors measure temperatures from 45°C to 2000°C. The 4-20 mA or 0-20 mA output is compatible with almost any indicator, controller, recorder, data logger etc., without the need for special interfacing or signal conditioning.

They are especially suited to low-emissivity targets such as steel rollers and other metal surfaces, even at low temperatures.

Fully configurable by PC, Rayomatic USB 2.2 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.

INFRARED  
THERMOMETERS



- ▶ Range from 45°C to 2000°C
- ▶ 2.0 to 2.4  $\mu\text{m}$
- ▶ Selectable 2-wire 4-20 mA or 0-20 mA output
- ▶ Temperature range, emissivity setting... configurable by PC via IRConfig software and USB cable
- ▶ Emissivity from 0.1 to 1.0
- ▶ 15:1, 25:1, 75:1 and CF optics
- ▶ OPC server capabilities
- ▶ Data acquisition, alarms and scrolling graphical display
- ▶ IP65 stainless steel housing
- ▶ Optional air/water cooled housing, air purge collar, laser sighting tool, dual laser sighting bracket, mounting brackets...



### AOIP SAS

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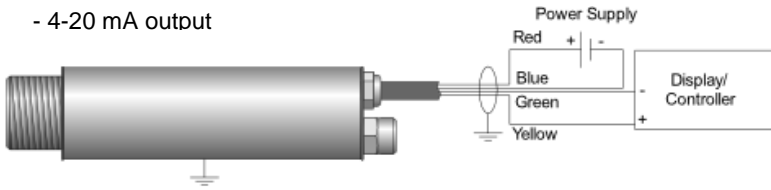
Tel: +33 (0)169 028 900 – Fax: +33 (0)169 020 599

Email: [export@aoip.com](mailto:export@aoip.com)

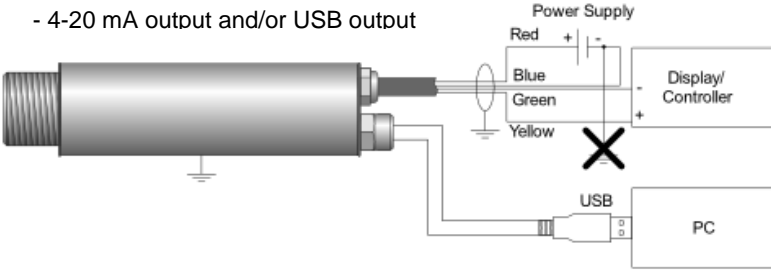
[www.aoip.fr](http://www.aoip.fr)

## Output connection

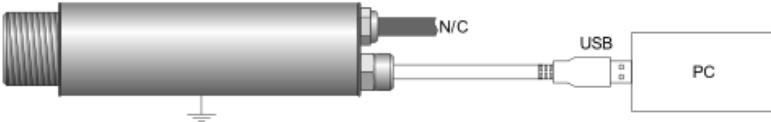
- 4-20 mA output



- 4-20 mA output and/or USB output



- USB output



## Technical specifications

### Range

LT: 45°C – 300°C  
PT: 100°C – 400°C  
MT: 250 – 1000°C  
HT: 450°C – 2000°C

### Optics

15:1, 25:1, 75:1, CF

### Outputs

Selectable linear 4-20 or 0-20 mA

### Configuration

Via PC through USB connection

### Accuracy

±1% RDG or 1°C

### Repeatability

±0.5% RDG or 0.5°C

### Emissivity

Adjustable from 0.1 to 1.0

### Response time

240 ms (90%)

### Spectral band

2.0 – 2.4 μm

### Supply voltage

24 VDC (Max 26 VDC)

### Sensor voltage

Min 11 VDC

### Loop impedance

900 Ω Max

### Construction

Stainless steel

### Dimensions

Ø 25 x 106.5 mm

### Thread mouting

M20 x 1 mm

### Weight with cable

175 g

### Cable length

4-20 mA output: 1 m / USB: 1 m  
(further lengths in option)

### Environmental rating

IP65

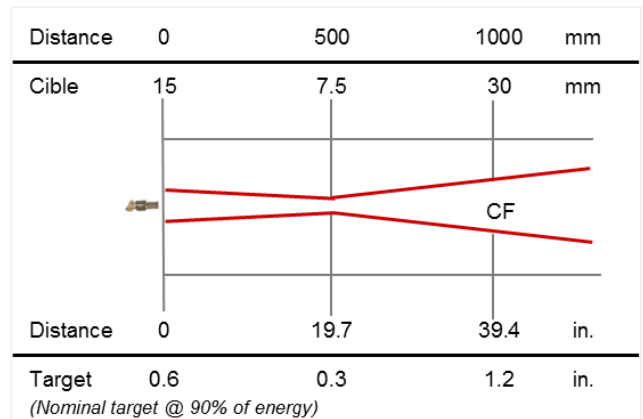
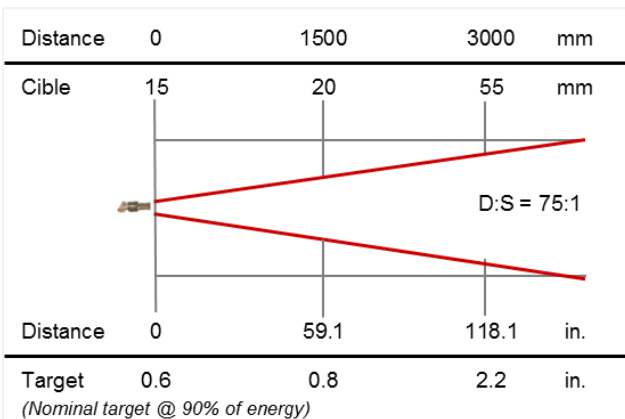
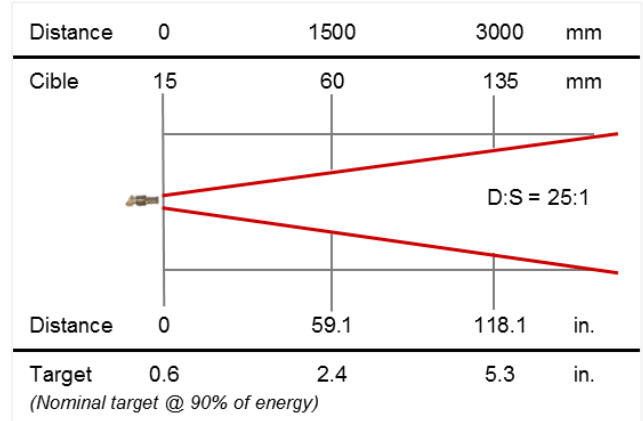
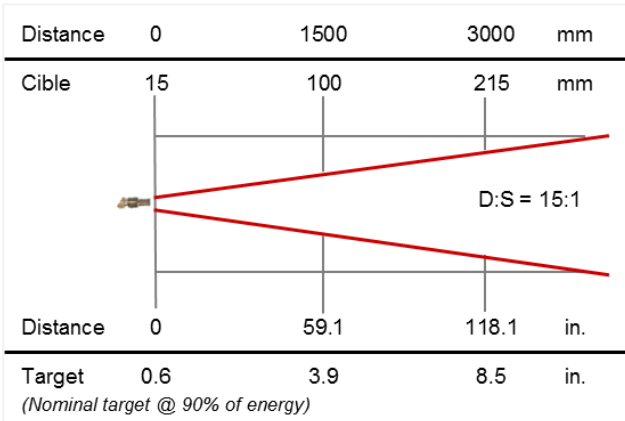
### Working temperature

0 to 70°C

### Relative humidity

95% non-condensing

## Optics



## Accessoires



FBL Fixed mounting bracket  
ABL Adjustable mounting bracket



LSTL Laser sighting tool



DLSBFL Dual laser sighting bracket, fixed  
DLSBAL Dual laser sighting bracket, adjustable  
DLSBCE Extended cable - 1 m



APSL Air purge collar



WJ Air / Water cooled jacket + air purge collar

## Code de commande

### USB-AA-BB-2.2-CC-D/MAN

Delivered in standard with IRConfig software, USB cable, output cable, instruction manual in English

Table AA	Optics – Distance to target
15	Optics 15:1, 100 mm @ 1500 mm (LT & PT only)
25	Optics 25:1, 60 mm @ 1500 mm (MT & HT only)
75	Optics 75:1, 20 mm @ 1500 mm (MT & HT only)
CF	Close focus lens, 7.55 mm @ 500 mm (MT & HT only)

Table BB	Temperature range
LT	45°C – 300°C (optics 15:1 only)
PT	100°C – 400°C (optics 15:1 only)
MT	250 – 1000°C
HT	450°C – 2000°C

Table CC	Accessories
NO	None
WJ	Air / Water cooled jacket and air purge collar

Table D	Calibration certificate
0	None
1	Factory traceable calibration certificate with data

**Extended cable, up to 29 m extension**  
PU2.2CE For 4-20 mA output - 1 m