



Non-contact thermometry best done  
with *INFRATHERM* pyrometers

**impac**<sup>®</sup>



# IN 300

## Compact pyrometer for non-metallic surfaces

Small, stationary infrared thermometer in 2-wire technique for non-contact temperature measurement of non-metallic surfaces between -20°C and 500°C

- ◆ Very small housing dimensions
- ◆ 2-wire technique
- ◆ Small spot sizes
- ◆ Stainless steel housing
- ◆ Easy electrical and mechanical installation
- ◆ Suitable for food industry
- ◆ Ambient temperature up to 70°C without cooling



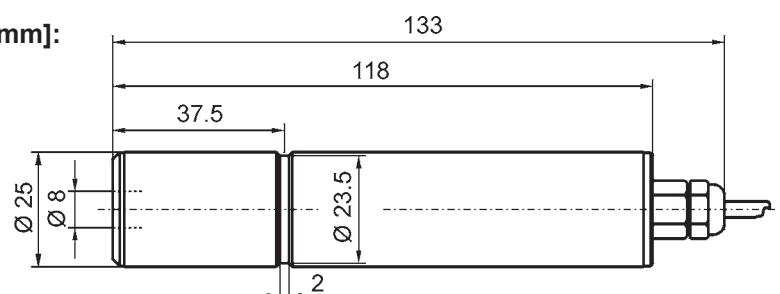
The **IN 300** is a stationary pyrometer for non-contact temperature measurement of non-metallic surfaces or painted, coated or anodized metals. The very small housing dimensions enable the integration of the pyrometer in compact production machines, the 2-wire technique enables very easy electrical connection.

The solid and robust design of the instrument guarantees high operational safety even in rough industrial environments.

**Typical applications** are measurements on:

- plastics
- rubber
- paper
- ceramics
- textiles
- food
- fluids
- painted parts
- asphalt
- wood
- glass
- coated metals

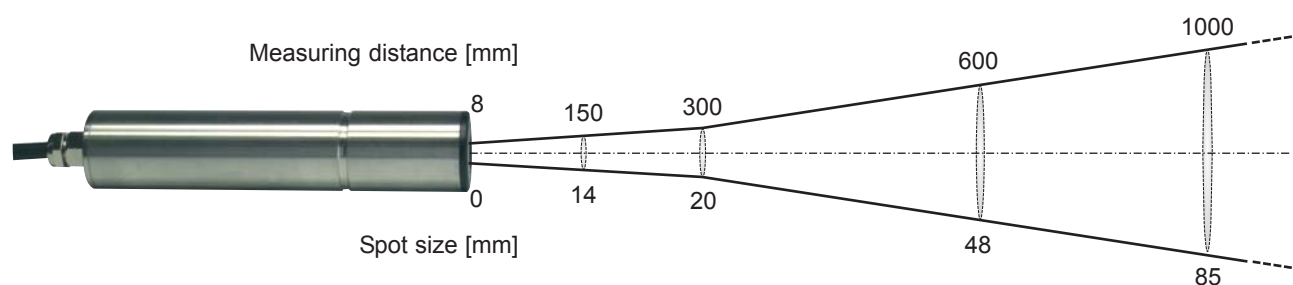
**Dimensions [mm]:**



## Technical data

Spectral range:	8 ... 14 $\mu\text{m}$ (no influence of water vapour)	Temp. dependence:	0 ... 60°C: 0.03% of measuring range / °C (23°C)
IR-detector:	thermopile Si-based	Power supply:	24 V DC $\pm$ 25% stab., ripple < 50 mV
Optics:	Ge lens	Ambient temperature:	0 ... +70°C
Output:	4 ... 20 mA, load independent current, temperature linear	Storage temperature:	-20 ... +70°C
Max load:	500 $\Omega$ at 24 V power supply	Housing:	stainless steel
Emissivity $\epsilon$ :	0.4 ... 1; adjustable	Dimensions:	120 mm x 25 mm (L x D)
Response time $t_{90}$ :	300 ms	Protection class:	IP 65 (DIN 40 050)
Accuracy:	1.5% of measuring range / °C ( $\epsilon = 1$ , $T_U = 23^\circ\text{C}$ )	Mounting position:	any
Repeatability:	1% of measuring range	Weight:	215 g
		Connection cable:	2 m, fixed
		CE label:	according to EU directives about electromagnetic immunity

## Optics



## Reference numbers

### Pyrometers:

3 856 310	0 ... 100°C
3 856 320	0 ... 200°C
3 856 330	-20 ... 300°C
3 856 350	0 ... 500°C



### Accessories:

3 890 600	Power supply 230 V AC $\Rightarrow$ 24 V DC (carrier rail mounting housing)
3 852 550	Power supply NG 2D; 85 ... 265 V AC $\Rightarrow$ 24 V DC, 600 mA, with 2 limit switches
3 890 640	DA 4000-N, LED-display, 2-wire power supply
3 890 650	DA 4000, LED-display, 2-wire power supply, 2 limit switches (relay contacts)
3 890 520	DA 6000, LED-display, RS232, 2-wire power supply, maximum value storage, analog output
3 890 530	DA 6000 with RS485
3 890 660	IP65 front cover for the LED-displays

3 890 610	Galvanic separator for measuring output (carrier rail mounting housing)
3 863 010	Converter 4 ... 20 mA to 0 ... 20 mA
3 834 220	Adjustable mounting support, standard design
3 834 230	Adjustable mounting support, rugged design
3 846 170	Mounting tube
3 835 180	Air purge unit, stainless steel
3 835 220	Air purge unit, stainless steel, short version
3 827 070	Laser targeting light
3 827 100	Twin laser targeting light
3 837 160	Stainless steel water cooling jacket with integrated air purge unit



Power supply CZ



LED digital display



Mounting support standard design



Mounting support rugged design



Air purge units



Water cooling jacket with air purge unit

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Specifications are subject to change without notice.