

**Product Information**

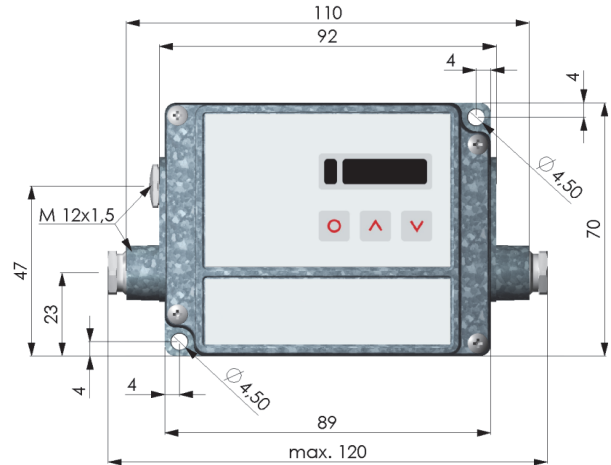
**Temperature**

**Infrared Thermometer  
IR-CT 20**

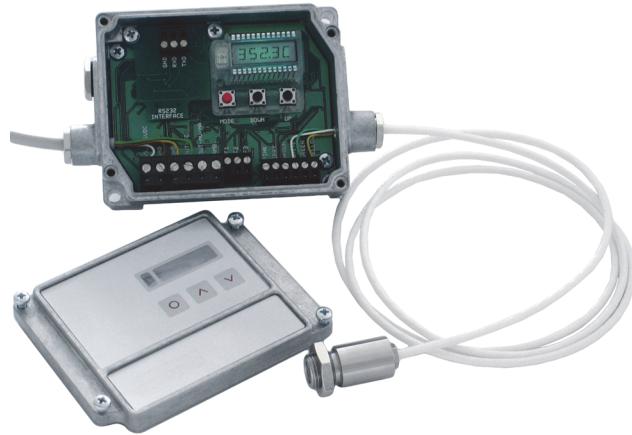
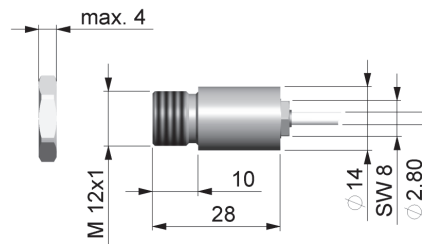
Measuring head : -20..+180 °C  
 Electronics : 0..65 °C

**Dimensions**

Measuring box:



Measuring head:



- Small infrared measuring head with 20:1 optical resolution
- Freely selectable and scalable analog output
- Robust and applicable without cooling

**Characteristics**

The infrared transmitter IR-CT 20 is designed for non-contact temperature measurements. The infrared measuring head allows very precise and contact-free measurements.

The infrared thermometer measures the surface temperature of the next visible surface and outputs it as linearized signal (current, voltage or thermocouple J, K).

The device is very robust and is applicable without cooling at ambient temperature up to 180 °C.

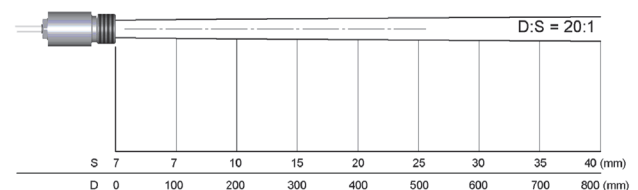
**Technical data**

Measuring range : -50..+975 °C  
 freely scalable via programming buttons  
 Spectral region : 8..14 µm  
 Optical resolution : 20:1 (precision glass optics)  
 System accuracy : ±1 % or ±1 °C (higher value applicable)  
 Reproducibility : ±0.5 % or 0.05 °C/K  
 (higher value applicable)  
 Response time : 150 ms (95 %)  
 Emissions-, transmission factor : 0,100..1,100 scalable  
 Output signal : 0..20 mA, 4..20 mA, 0..5 V, 0..10 V  
 thermocouple type J or K  
 Output impedance :  
 mA : max. 500 Ohm (at 8..36 V DC)  
 V : min. 100 kOhm load resistance  
 Thermocouple : 20 Ohm  
 Power supply : 8..36 V DC  
 Power consumption : max. 100 mA  
 Cable length : 1 m (atandard), 3 m, 15 m  
 Protection class : IP65 (NEMA-4)  
 Vibration (measuring head)  
 IEC 68-2-6 : 3G, 11..200 Hz, each axis  
 Shock (measuring head)  
 IEC 68-2-27 : 50G, 11 ms, each axis  
 Weight : Meas. head: 40 g, electronics: 420 g

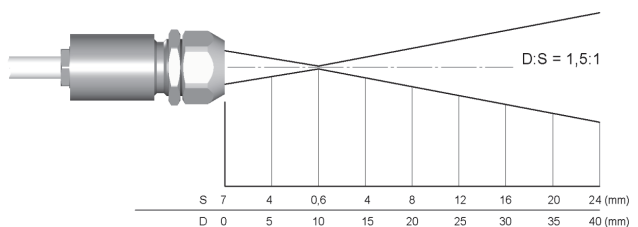
Working temperature

**Optical resolution**

Optical resolution: standard



Optical resolution: with option CF (auxiliary lens for measuring smallest objects)



continued on next page

## Product Information

Temperature

### Ordering code

1. 2.  
IR-CT20 -  -

1. Cable length L	
L01	1 m (standard)
L03	3 m
L15	15 m
2. Options	
00	without option
CF	Auxiliary lens for measuring smallest objects (measuring spot diameter 0.6 mm @ 10 mm, at long distance 1.5:1)

### Accessories

#### MW

Mounting bracket, fixed

#### MB

Mounting bolts with M12x1 thread

#### MG

Mounting fork, adjustable in 2 axis with M12x1 mount

#### FVS

Standard air purge collar

#### FVL

Laminar air purge collar