

Edge Lite

-40 to 1100°C

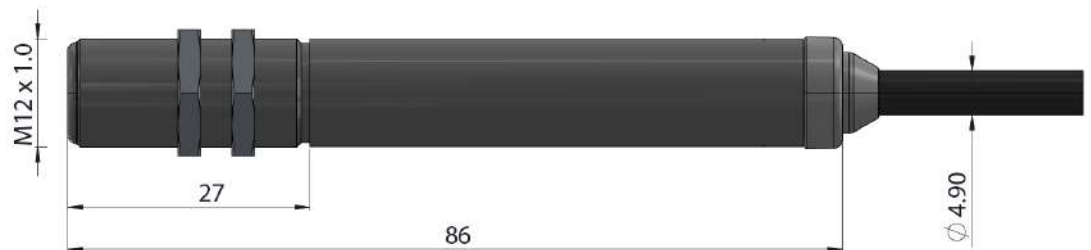
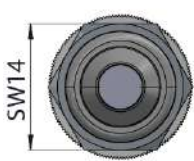
Fully integrated compact pyrometer



Features

- It offers a short response time of 20 ms for fast measurements.
- The device provides a freely scalable voltage output within the measuring range.
- No cooling is required for ambient temperatures up to 80°C.
- Sensor and controller are fully integrated in one compact housing for space-saving installation.
- It features a status LED with alignment aid to support setup and operation.
- The pyrometer supports parallel digital and analog operation for flexible integration.
- Optional longer cable lengths and mounting options for customized installation.
- Adjustable emissivity and transmittance for various surface types
- Intelligent signal processing functions configurable via software
- Open Collector output with 200mA

Pyrometer Drawing



*all dimensions in mm

Spot Sizes

Standard Focus (in mm)

SF 15	15:1	6.5	11.5	14	18	23.5	29.5	35.5
Distance		0	100	200	300	400	500	600

Close Focus (when using the screwable CF lens, in mm)

CF 15	15:1	6.5	3.7	0.8	4.4	8.1	11.8	15.4
Distance		0	5	10	15	20	25	30

 = smallest spot size / focal point (mm)

The ratio D:S (example 15:1, see table) describes the ratio Distance (distance from the front edge of the sensor to the measuring object) to Spot size (measurement spot size)

Technical Specifications

Model	Lite
Optical resolution	15:1
Measuring range ^[1]	-40 °C up to 600 °C (1100 °C)
Spectral range	8 to 14 µm
System accuracy ^[2, 3, 4]	±1.5 % or ±1.5 °C
Repeatability ^[2]	±0.75 % or ±0.75 °C
Temperature resolution (NETD) ^[5]	50 mK
Response time ^[6]	20 ms
Emissivity	0.100 to 1.100
Transmittance	0.100 to 1.100
Signal processing	Intelligent averaging, Min/Max, Hold function with threshold/hysteresis (adjustable via software)
Supply voltage	5 ... 30 VDC
Max. current consumption	< 6 mA (without LED) / < 20 mA (with LED)
Digital interface	3.3V-LVTTL or TTL to USB converter
Analog output ^[7]	0 ... 5 V / 0 ... 10 V (freely scalable within the measuring range)
Switching output	Open collector for alarm; 200 mA
Connection	Integrated cable with open ends (ferrules); standard length 1 m; optional 3 m, 8 m, 15 m

Model	Lite
Mounting	Direct fastening via integrated M12x1 thread or fastening using the hexagon nut included in the scope of delivery
Temperature range	Storage: -40 ... 85 °C Operation: -20 ... 80 °C
Humidity	10 % RH ... 95 % RH (non-condensing)
Shock (DIN EN 60068-2-27)	50g, 11 ms, each axis
Vibration (DIN EN 60068-2-6)	3g, 11 ... 200 Hz, each axis
Protection class (DIN EN 60529)	IP63
Material	Stainless steel (1.4404)
Weight	approx. 60 g (without cable)
Control and indicator elements ^[8]	Green and red LED (status, alarm and alignment aid) Sensor configuration optionally possible via InfraSoft

[1] Measuring range can optionally be extended to 1100 °C
[2] Valid for object temperatures > 0 °C and at an ambient temperature of 24 °C ±2 °C.
[3] At 5 VDC; for higher VDC values, ±2 °C or ±2% applies, whichever is greater (ε = 1).
[4] Valid for object temperatures > ambient temperature; for object temperatures > 200 °C, an additional temperature coefficient of 0.05 K/°C or 0.05 %/°C applies; otherwise 0.15 K/°C or 0.15 %/°C applies; whichever is greater shall apply.
[5] With a time constant of 200 ms and an object temperature of 200 °C
[6] 0 - 90 % energy; adjustable via software
[7] depends on supply voltage
[8] Access with InfraSoft requires USB adapter (see accessories)

Accessories

TM-AP8 Air purge collar with 8 mm hose connection



TM-APL Air purge collar laminar



TM-AP Air purge collar



TM-USB A TTL to USB Converter



TM-TA Pipe Adapter



TM-FB Mounting Bracket



TM-T20 Reflection Protection Tube, M12x1 External Thread



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