# Intrinsically-Safe Non-Contact Temperature Meter with Laser Sighting Ex-MP 4


***For non-contact temperature measurement and monitoring of temperature processes in Ex-hazardous areas.***

- high accuracy
- simple operation
- quick response time
- laser target sighting
- Measure from Zone 1 into Zone 0

The intrinsically-safe non-contact temperature measuring equipment Ex-MP 4 is a robust yet exceedingly handy and easy to use instrument for temperature measuring in hazardous areas.

***The benefits of non-contact measurement***

· Increased safety when determining the temperature of fast moving objects.
· No antennas mean that frictional heat cannot affect the measurement.
· No mark or blemish is left on the object being measured.

***Response time***

· Fast and accurate. Pyrometers respond to emitted energy and are around 20 to 1000 times quicker than traditional direct contact thermometers.

***Ex-data:***

Ex designation:
⟨Ex⟩ II 2 G EEx ia IIC T4

EC-Certificate of Conformity:
TÜV 00 ATEX 1580 X

***Low maintenance and non invasive***

· The temperature of the object being measured is not affected by the procedure.
· Non contact of the detector means no wear and tear.
· No fixing or fastening points required on either the object or equipment.

***Hard to reach objects and moving materials***

· The optics of the pyrometer are aimed at the object to be measured and with the laser sighting it is possible for both small and distant objects to be targeted.
· Hazardous and aggressive materials can be safely measured - and without fear of damaging the equipment.
· The compact size of the pyrometer allows it to be used in even the most awkward positions, with only a clear line of sight to the target area being required.
· With direct contact measurement, poor heat conduction or heat capacity of the object can prevent insufficient heat flow to a measuring device.

***Technical data:***

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|---|---|---|---|
| Temperature range: | from -18°C to +260°C (0°F to 500°F) | Emissivity: | preset 0.95 |
| | | Optics D/L: | =1/6 |
| Display resolution: | 0.5°C (1.0 F) | Spectral response: | 7 to 18 µm |
| Target sighting: | Laser (class 2) | Ambient operating range: | 0°C…+50°C |
| Accuracy: (at 23°C) | -18°C … -1°C ±3°C<br>0°C … 99°C ±2°C<br>100°C … 260°C ±2% ± 2°C or ± 2% of reading<br>- whichever is greater, | Storage temperature range: (without battery) | -20°C…+65°C |
| | | Relative humidity: | 10 to 95% r.H. non-condensing at up to 30 deg C |
| Repeatability: | ± 2% of reading or ± 2°C<br>- whichever is greater | Power supply: | 9V alkaline battery type IEC 6LR61 |
| | | Dimensions: | 152 x 101 x 38mm |
| Response time: | 500 msec | Weight: | ~ 200 g |