



Intrinsically-Safe Non-Contact Temperature Meter

with Laser Sighting ST 80 IS

The intrinsically-safe non-contact temperature measuring equipment ST 80 IS 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 a traditional direct contact thermometer.

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.



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

- high accuracy
- simple operation
- quick response time
- laser sighting: offset 8 point circular
- data logging: 12 points
- display resolution: 0.1°C/F
- distance to spot (D:S) 50:1
- external temperature probe

Ex-data:



I.S. Class I Division 1 Groups A-DT4
Class I Zone 0 AEx ia IIC T4

Technical data:

Temperature	
Range:	-25°F to 1400°F (-32°C to 760°C)
Accuracy:	1% or = ±2°F (1°C)
ambient	whichever is greater
operating	above 73°F (23°C)
temperature	
@ 73°F (23°C)	±3.6°F (2°C) @ 0°F to 73°F (-18°C to 23°C)
	±4.5°F (2.5°C) @ -15°F to 0°F (-26°C to -18°C)
	±5.5°F (3°C) @ -25°F to -15°F (-32°C to 26°C)
Repeatability:	≤0.5% or ≤ 1.8°F (= 1°C) whichever is greater
Response	
Time:	≤ 0.5 second (95% of reading)
Ambient	
Operating	
Range:	32°F to 120°F (0°C to 50° C)
Power:	9V Alkaline or NiCd Battery
Weight:	11 oz (320g)