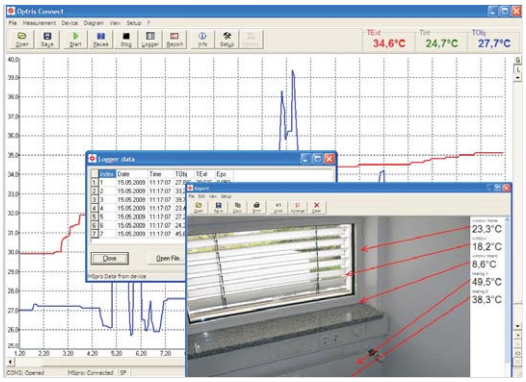
More Precision.

optris

optris® MS Series



Smart infrared thermometers with USB interface and high precision optics

Wide temperature ranges of -32 to 760°C, laser aiming and optical resolutions of up to 40:1 allow technicians to carry out accurate noncontact surface measurements for electrical and mechanical maintenance, HVAC checks, automotive testing and other applications, anywhere that temperature is a factor.

The optris® MS thermometers enable you to measure objects as small as 13 mm. Just spot the object, press the trigger and the infrared thermometers will show the temperature in an instant. Functions like MAX and MIN temperature results are shown in the display right away.

optris® MSPlus: OFFSET and HOLD make measurements smart. Object emissivities can be adjusted even after the measurement was taken.

optris® MSPro: Data Logger and OptrisConnect Report Software support data storage, data processing and reporting on PC.

FEATURES

- Precision optics for accurate noncontact temperature measurement
- Temperature ranges from -32 up to 760°C
- Fast 0.3 second scanning of cold and hot spots
- Exact measurement of objects as small as 13 mm in any distance less than 140 mm
- Optical resolutions up to 40:1
- Laser sighting with narrow beam aiming for accurate readings
- Adjustable acoustic HIGH-/LOW-alarm with changing backlight colors
- USB interface, thermocouple input type K, OptrisConnect Report Software
- Extremely lightweight

Display

- Current temperature
- MIN-/MAX-readings: current and last
- Symbol for display backlight and laser
- HOLD-function

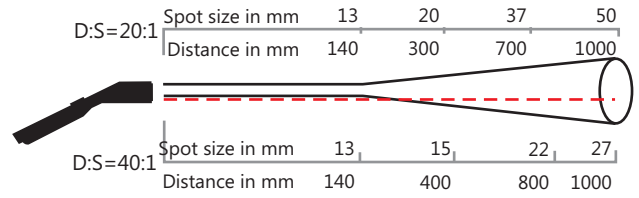
MSPlus/Pro

:- HIGH-/LOW-alarm
- Emissivity

optris® MS Series

Technical data	MS	MSPlus	MSPro
Temperature range	-32°C to 420°C (-20°F to 788°F)	-32°C to 530°C (-20°F to 980°F)	- 32°C to 760°C (-20°F to 1440°F)
System accuracy (at T_{amb} = 23 ±5°C)	±1% or ±1°C from 0°C to 420°C	±1% or ±1°C from 0°C to 530°C	±1% or ±1°C from 0°C to 760°C
	± 1,5°Cvon 19,9°Cbis 0°C		
	± 2,5°Cvon -0,1°Cbis -20°C		
	± 3°C von -20,1°C bis -32°C		
Repeatability	±0.5% or ±0.7°C (20°C...420°C)	±0.5% or ±0.7°C (0°C...530°C)	±0.75% or ±0.75°C (0°C...760°C)
Optical resolution (D:S)	20:1, 13 mm spot size up to 140 mm		40:1, 13 mm spot size up to 260 mm
Resolution (display)	0.2°C (0.5°F)	0.1°C (0.1°F)	
Response time (95%)	300 ms		
Ambient temperature	0°C to 50°C		
Storage temperature	-20°C to 60°C w ithout battery		
Spectral range	8 - 14 µm		
Emissivity	fixed: 0.95	0.100 – 1.100 adjustable	
Configurations	Min/Max/Hold/°C/°F	Min/Max/Hold/°C/°F/Offset	
Alarm functions	-	Visual LCD alarm colors and acoustic HIGH-/LOW-alarm	
PC Interface, Softw are, Thermocouple Input	USB interface	USB interface, OptrisConnect Report softw are	USB interface, OptrisConnect Report softw are, thermocouple element type K
Laser	<1 mW laser class IIa, laser beam w ith 9 mm offset		
Weight/dimensions	150 g, 190 x 38 x 45 mm		180 g; 190 x 38 x 45 mm
Battery	9 V alkaline battery		
Battery life	20 hours w ith laser and backlight on 50%		
	40 hours w ith laser and backlight off		
Relative humidity	10 – 95 % RH non condensing, at <30°C ambient temperature		

Distance-to-Spot-Ratio D:S



Applications

Mechanical maintenance

Observe temperatures of motors and drives, bearings and valves. Gather temperature data of heating and ventilation components. Check furnace performance and steam distribution systems.

Electrical maintenance

Infrared thermometers are proven time saving tools for predictive maintenance of electrical systems. Check out temperature problems safely with connectors, fuses, electric motors, motor windings, insulations, electrical wiring and electrical cabinets before damages occur.

Automotive testing

Check temperatures of engines and catalytic converters, scan ignition system problems, analyse cooling system restrictions, diagnose air conditioning systems, check tyres and brakes with uneven braking.

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Development and sales of portable and stationary infrared measuring instruments.

Specifications are subject to change without notice.

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