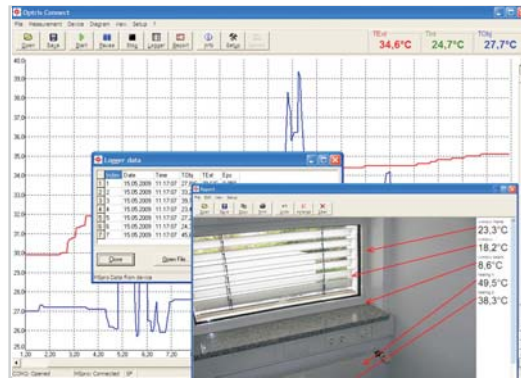


MiniRay



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 MiniRay 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.

MiniRay Plus: OFFSET and HOLD make measurements smart. Object emissivities can be adjusted even after the measurement was taken.

MiniRay Pro: Data Logger and Connect 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, Connect Report Software
- Extremely lightweight

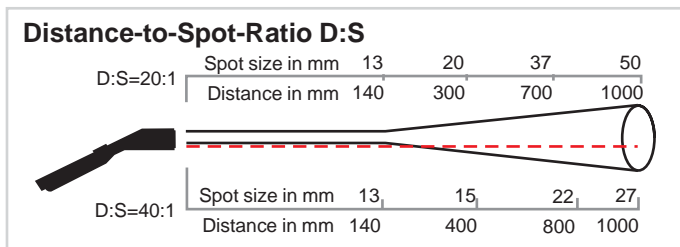
Display



- Current temperature
- MIN-/MAX-readings: current and last
- Symbol for display backlight and laser
- HOLD-function
- Plus/Pro:**
- HIGH-/LOW-alarm
- Emissivity

MiniRay

Technical data	MiniRay	Plus	Pro
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	±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°C ±0.07°C/°C from 0°C to -32°C		
Repeatability	±0.5% or ±0.7°C from 0°C to 420°C	±0.5% or ±0.7°C from 0°C to 530°C	±0.75% or ±0.75°C from 0°C to 760°C
	± 0.7°C ± 0.05°C/°C from 0°C to -32°C		±0.75°C ±0.07°C/°C from 0°C to -32°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 without 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, Software, Thermocouple Input	USB interface	USB interface, Connect Report software	USB interface, Connect Report software, thermocouple element type K
Laser	<1 mW laser class IIa, laser beam with 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 with laser and backlight on 50%		
	40 hours with laser and backlight off		
Relative humidity	10 – 95 % RH non condensing, at <30°C ambient temperature		
Standard accessories	-	Soft pouch, Wrist strap, Tripod adapter, Rubber protection boot	



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.



Thank you for reading this data sheet.

For pricing or for further information, please contact us at our UK Office, using the details below.



UK Office

Keison Products,

P.O. Box 2124, Chelmsford, Essex, CM1 3UP, England.

Tel: +44 (0)330 088 0560

Fax: +44 (0)1245 808399

Email: sales@keison.co.uk

Please note - Product designs and specifications are subject to change without notice. The user is responsible for determining the suitability of this product.