

optris® P20 Series

Infrared thermometers for demanding applications



Features

- Temperature ranges from 0°C to 2000°C
- High optical resolutions up to 300:1
- Precise aiming with laser and scope sighting
- Adjustable emissivity from 0.100 - 1.000
- Different spectral responses for a variety of advanced applications
- MAX/MIN function and audible and visible HIGH-/LOW-alarm
- USB interface, free Optris Connect Software
- Data logger for 2000 measured values

General Specifications

Ambient temperature	0 - 50°C
Storage temperature	-20 to 60°C (no battery)
Relative humidity	10 - 95%, non-condensing
Size	264 x 204 x 60 mm
Weight	1000 g

Electrical Specifications

Output/digital	USB interface
Power	Ni-MH rechargeable battery
Battery lifetime	5 h laser and backlight on 25 h without laser and backlight
AC Adapter	220 VAC, 50/60 Hz

Measurement Specifications

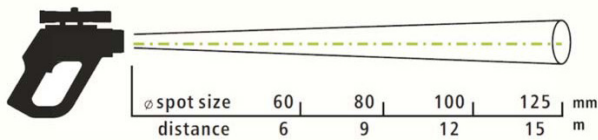
Temperature ranges	0 to 1300°C (P20 LT) 650°C to 1800°C (P20 1M) 385°C to 1600°C (P20 2M) 1000°C to 2000°C (P20 05M)
Spectral range	8 - 14 µm (P20 LT) 1.0 µm (P20 1M) 1.6 µm (P20 2M) 525 nm (P20 05M)
Optical resolution	120:1 (P20 LT) 300:1 (P20 1M/2M) 150:1 (P20 05M)
System accuracy (at T _{amb} = 23 ± 5°C)	±1% or ±2°C (P20 LT) ¹⁾ ±(0,3% of reading +2°C) (1M/2M, 05M)
Repeatability	±0,5% or ±1°C (P20 LT) ¹⁾ ±(0,1% of reading +1°C) (1M/2M, 05M)
Response time	300 ms (P20 LT) 100 ms (1M/2M, 05M)
Emissivity (adjustable)	0.100 - 1.000
Sighting	Double laser class II (<1 mW)
Sighting scope	All models
Signal processing	MAX/MIN, Scan/Hold function
Alarm functions	Audible and visible HIGH/LOW alarm
Data storage	2000 values
LCD backlight	Three color alarm indication
Software	Optris Connect

¹⁾ whichever is greater

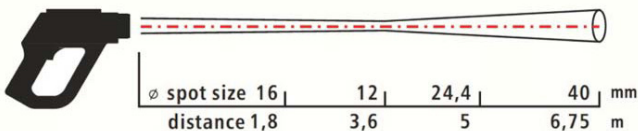
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Optical Specifications

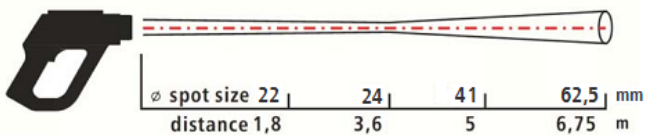
P20 LT D:S = 120:1



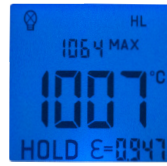
P20 1M/2M D:S = 300:1



P20 05M D:S = 150:1

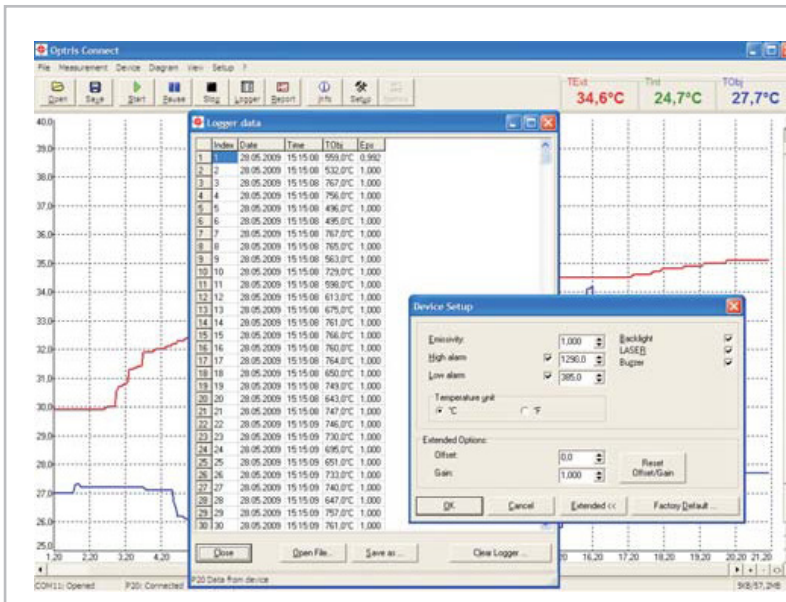


Display



- HIGH-/LOW-alarm (3-coloured display)

optris Connect - Reporting Software



- Setup of parameters
- Download of logger data
- Display and record of temperature trends
- Image based report function
- Runs on Windows 8-tablet PCs
- Software included



Non-contact temperature measurement from a safe distance

Specifications are subject to change without notice. P20 Series-DS-E2013-09-A