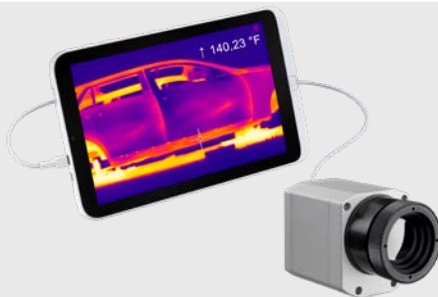
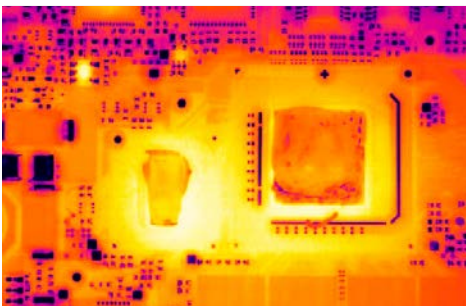
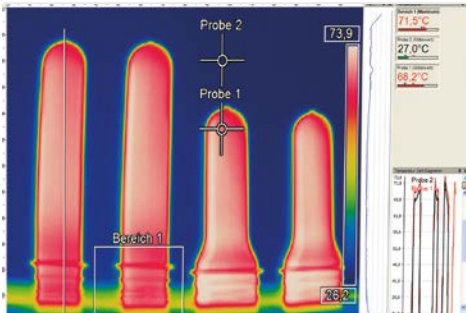


IR camera for the detection of slightest temperature differences

Features:

- Thermal sensitivity of 40 mK allows for detection of slightest differences in temperature
- Compact size of 46 x 56 x 90 mm (1.8 x 2.2 x 3.5 in)
- Frame rate of 80 Hz / switchable to 27 Hz
- Withstands ambient temperatures of up to 60 °C (140 °F) without additional cooling



For further information as well as the product configurator, please visit:
www.optris.com/thermal-imager-pi400

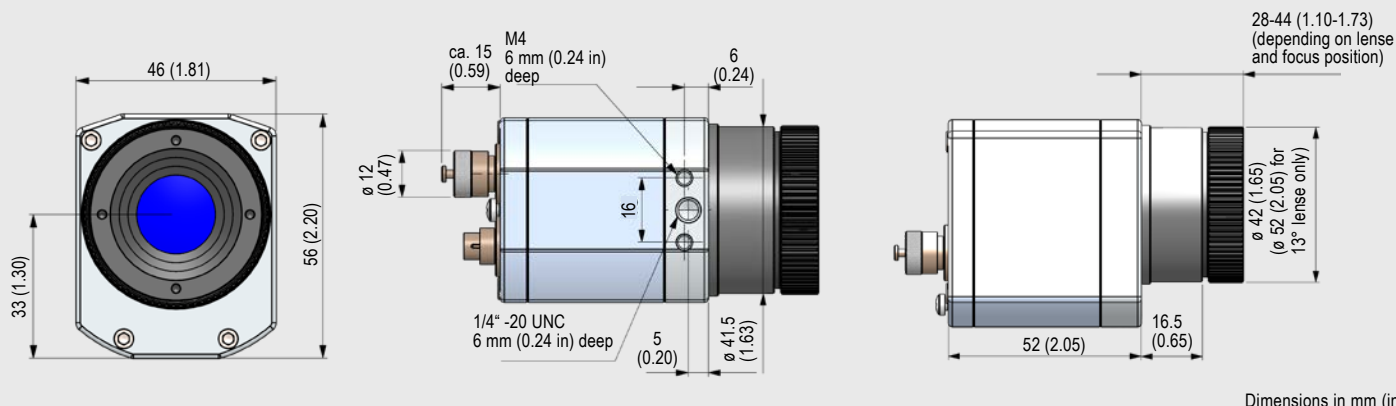
Technical specifications

Optical resolution	382 x 288 pixels
Detector	FPA, uncooled (25 µm x 25 µm)
Spectral range	7.5 – 13 µm
Temperature ranges	-20 ... 100 °C (-4 ... 212 °F) 0 ... 250 °C (32 ... 482 °F) (20) 150 ... 900 °C ¹⁾ ([68] 302 ... 1652 °F ¹⁾) optional temperature range 200 ... 1500 °C (392 ... 2732 °F)
Frame rate	80 Hz / 27 Hz
Optics (FOV)	13° x 10° / f = 41 mm (f = 1.6 in) or 29° x 22° / f = 18.7 mm (f = 0.7 in) or 53° x 40° / f = 10.5 mm (f = 0.4 in) or 80° x 56° / f = 7.7 mm (f = 0.3 in)
Thermal sensitivity (NETD)	0.04 K with 29° x 22° FOV / F = 0.8 0.04 K with 53° x 40° FOV / F = 0.8 0.04 K with 80° x 56° FOV / F = 0.8 0.06 K with 13° x 10° FOV / F = 1.0
Accuracy	±2 °C or ±2 % (±3.6 °F or ±2 %), whichever is greater
PC interface	USB 2.0 / optional USB to GigE (PoE) interface
Process interface (PIF), standard	0–10 V input, digital input (max. 24 V), 0–10 V output
Process interface (PIF), industrial	2x 0–10 V input, digital input (max. 24 V), 3x 0–10 V output, 3x relay (0–30 V / 400 mA), fail-safe relay
Cable length (USB)	1 (standard) / 5 m / 10 m / 20 m (3.3 / 16.4 / 32.8 / 65.6 ft) 5 and 10 m (16.4 and 32.8 ft) also as HT cable (180 or 250 °C [356 or 482 °F])
Ambient temperature	0 °C ... 60 °C (32 °F ... 140 °F)
Storage temperature	-40 ... 70 °C (-40 ... 140 °F)
Relative humidity	20–80 %, non-condensing
Enclosure (size / rating)	46 x 56 x 90 mm (1.8 x 2.2 x 3.5 in) / IP 67 (NEMA 4)
Weight	320 g (11.3 oz), incl. lens
Shock / Vibration ²⁾	IEC 60068-2
Tripod mount	¼-20 UNC
Power supply	via USB
Scope of supply	<ul style="list-style-type: none"> • USB camera with 1 lens • Table tripod • Software package optris® PIX Connect • Rugged outdoor case <ul style="list-style-type: none"> • USB cable (1 m [3.3 ft]) • Standard PIF with cable (1 m [3.3 ft]) and terminal block

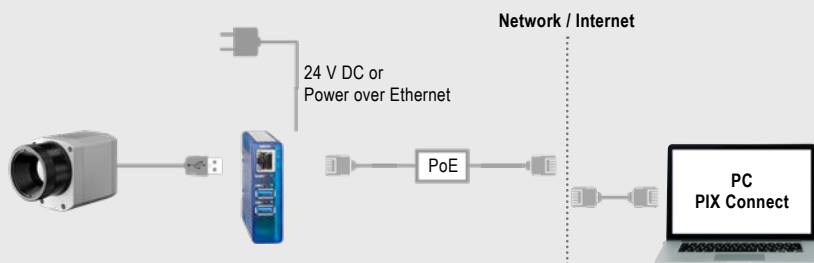
¹⁾ Accuracy effective starting at 150 °C

²⁾ For more details see operator's manual

Dimensions



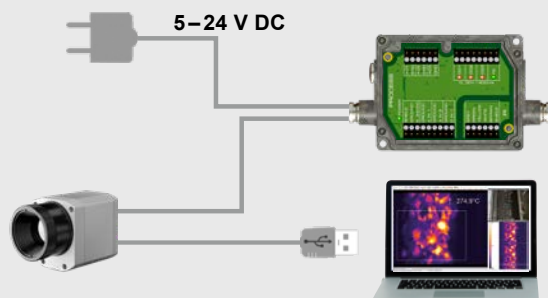
Process integration



optris® USB-Server Gigabit 2.0

- Network connection via Gigabit Ethernet
- Full TCP/IP support incl. routing and DNS
- Two independent USB ports
- Power via PoE or external voltage supply at 24 – 48 V DC
- Galvanic isolation 500 V_{RMS}
- Remotely configurable via web based management

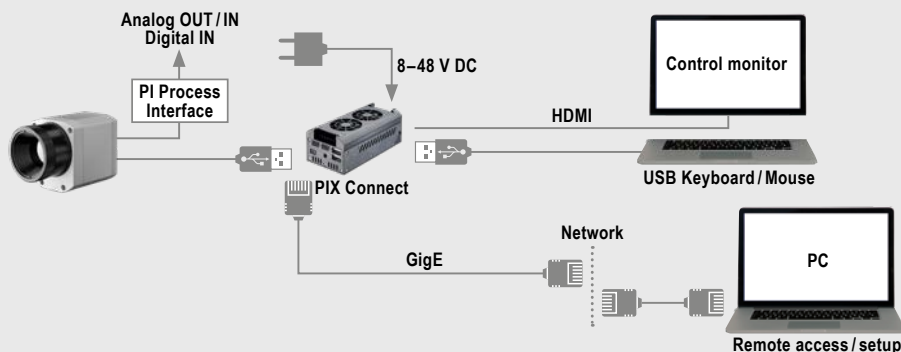
For further information please visit www.optris.com/usb-server-industry-isochron



optris® Industrial process interface

- Use of camera for process monitoring in industrial environments
- Continuous fail safe monitoring of imager, software and cable connections
- 3 analog / alarm outputs, 2 analog inputs, 1 digital input, 3 alarm relays, 1 fail-safe relay

For further information please visit www.optris.com/industrial-process-interface



optris® PI NetBox

- Miniature PC as add-on to the PI series for stand-alone system
- Integrated hardware and software watchdog
- Connections: 2x USB 2.0, 1x USB 3.0, 1x Mini-USB 2.0, Micro-HDMI, Ethernet (Gigabit Ethernet), micro SDHC / SDXC card

For further information please visit www.optris.com/pi-netbox