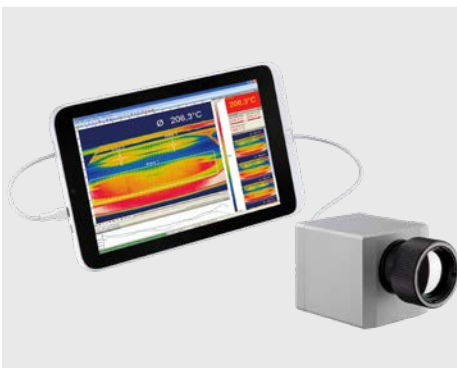
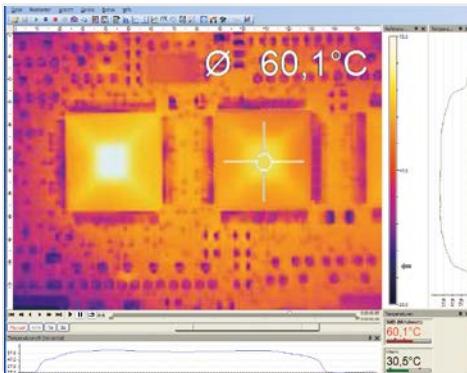


Small IR camera ideal
for fast processes

Features:

- Outstanding price performance ratio
- Temperature range from -20 to 1500 °C
- High frame rate of 120 Hz
- Compact size: 45 x 45 x 60 - 76 mm (1.8 x 1.8 x 2.4 - 3.0 in)



For further information as well as the
product configurator, please visit:
www.optris.com/thermal-imager-pi160

Technical specifications

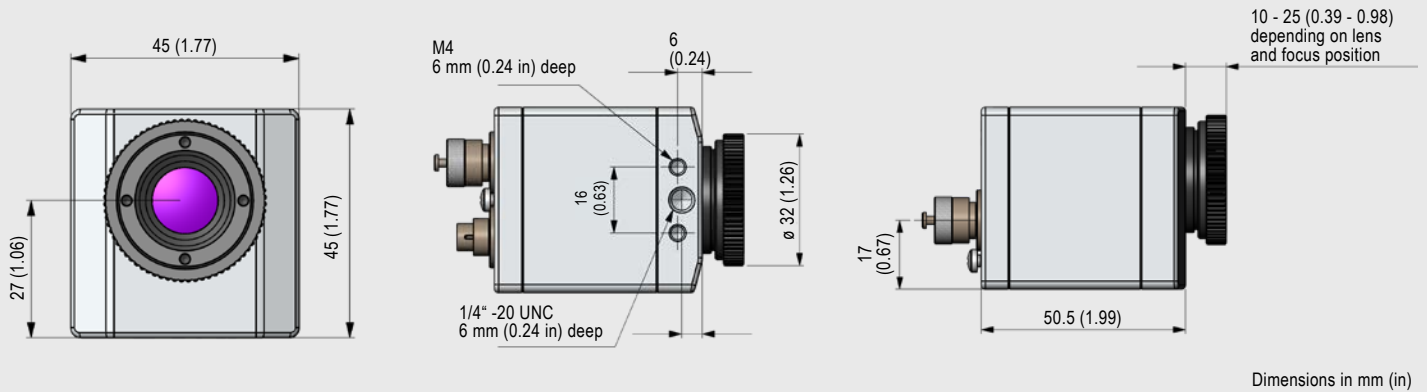
Optical resolution	160 x 120 pixels
Detector	FPA, uncooled (25 µm x 25 µm)
Spectral range	8 – 14 µm
Temperature ranges	-20 ... 100 °C, 0 ... 250 °C, (20) 150 ... 900 °C ¹⁾ , (-4 ... 212 °F, 32 ... 482 °F, [68] 302 ... 1652 °F) optional temperature range: 200 ... 1500 °C ¹⁾ (392 ... 2732 °F) ²⁾
Frame rate	120 Hz
Optics (FOV)	6° x 5° FOV / f = 35.5 mm (1.40 in) or 23° x 17° FOV / f = 10 mm (0.39 in) or 41° x 31° FOV / f = 5.7 mm (0.22 in) or 72° x 52° FOV / f = 3.3 mm (0.13 in)
Thermal sensitivity (NETD)	40 mK with 23° x 17° FOV / F = 0.8 0.3 K with 6° x 5° FOV / F = 1.6 0.1 K with 41° x 31° FOV and 72° x 52° FOV / F = 1
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 m (3.3 ft) (standard), 5 m (16.4 ft), 10 m (32.8 ft), 20 m (65.6 ft) 5 m (16.4 ft) and 10 m (32.8 ft) also as HT cable (180 or 250 °C [356 or 482 °F])
Ambient temperature	0 °C ... 50 °C (32 °F ... 122 °F)
Storage temperature	-40 ... 70 °C (-40 ... 158 °F)
Relative humidity	20 – 80 %, non-condensing
Enclosure (size / rating)	45 x 45 x 60 - 76 mm (1.8 x 1.8 x 2.4 - 3.0 in) (depending on lens + focus position) / IP 67 (NEMA 4)
Weight	195 g (6.88 oz), lens included
Shock / Vibration ³⁾	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 • USB cable (1 m [3.3 ft]) • Table tripod • Standard PIF with cable (1 m [3.3 ft]) and terminal block • Software package optris® PIX Connect • Aluminum case

¹⁾ Accuracy effective starting at 150 °C (302 °F)

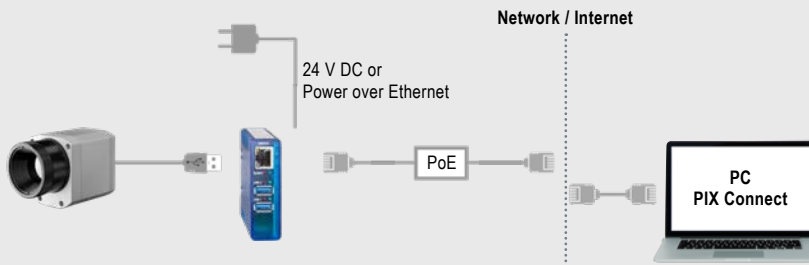
²⁾ The additional measuring range is not available for 72° HFOV

³⁾ For more details see operator's manual

Dimensions



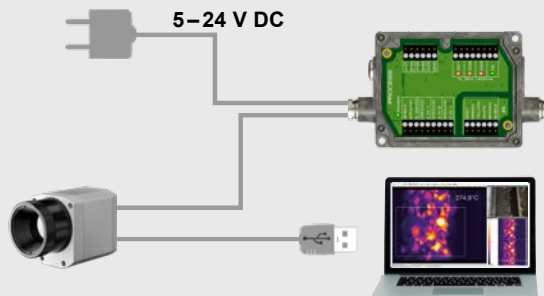
Process integration



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

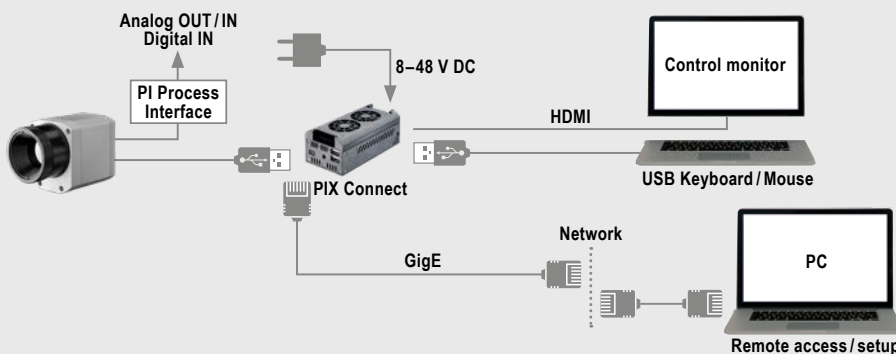
For further information please visit www.optris.com/usb-server-industry-isochron



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