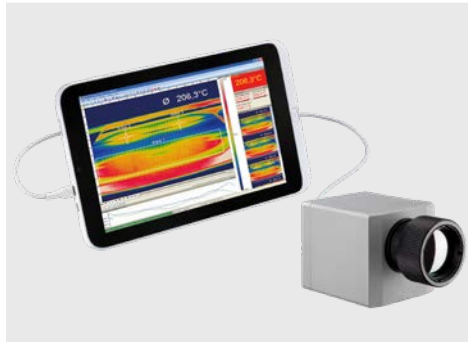
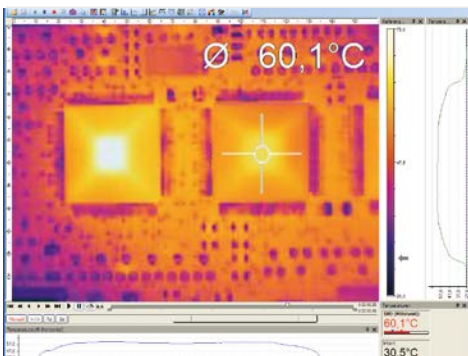


**Small IR camera ideal
for fast processes**

Features:

- Outstanding price performance ratio
- Temperature range from -20 until 1500 °C
- High frame rate of 120 Hz
- Compact size: $45 \times 45 \times 60\text{ mm}$



Further information as well as the product configurator at
www.optris.global/thermal-imager-optris-pi160

Technical specifications

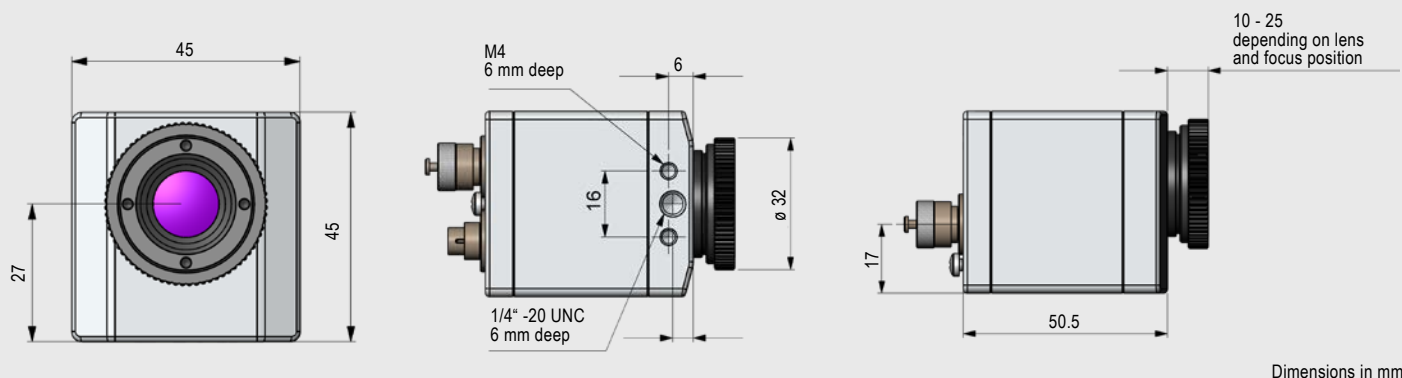
Optical resolution	160 x 120 Pixel
Detector	FPA, uncooled ($25\text{ }\mu\text{m} \times 25\text{ }\mu\text{m}$)
Spectral range	$8 - 14\text{ }\mu\text{m}$
Temperature ranges	$-20 \dots 100\text{ °C}$, $0 \dots 250\text{ °C}$, (20) $150 \dots 900\text{ °C}^{1)}$, optional temperature range: $200 \dots 1500\text{ °C}^{2)}$
Frame rate	120 Hz
Optics (FOV)	$6^\circ \times 5^\circ$ FOV / $f = 35.5\text{ mm}$ or $23^\circ \times 17^\circ$ FOV / $f = 10\text{ mm}$ or $41^\circ \times 31^\circ$ FOV / $f = 5.7\text{ mm}$ or $72^\circ \times 52^\circ$ FOV / $f = 3.3\text{ mm}$
Thermal sensitivity (NETD)	40 mK with $23^\circ \times 17^\circ$ FOV / $F = 0.8$ 0.3 K with $6^\circ \times 5^\circ$ FOV / $F = 1.6$ 0.1 K with $41^\circ \times 31^\circ$ FOV and $72^\circ \times 52^\circ$ FOV / $F = 1$
Accuracy	$\pm 2\text{ °C}$ or $\pm 2\%$, whichever is greater
PC interfaces	USB 2.0 / optional USB to GigE (PoE) interface
Standard process interface (PIF)	0–10 V input, digital input (max. 24 V), 0–10 V output
Industrial process interface (PIF)	2x 0–10 V input, digital input (max. 24 V), 3x 0/4–20 mA outputs, 3x relays (0–30 V/ 400 mA), fail-safe relay
Cable length (USB)	1 m (standard), 5 m, 10 m, 20 m 5 m and 10 m are also available as high temperature cable (180 or 250 °C)
Ambient temperature	$0 \dots 50\text{ °C}$
Storage temperature	$-40 \dots 70\text{ °C}$
Relative humidity	20–80 %, non condensing
Enclosure (size / rating)	$45 \times 45 \times 60 - 76\text{ mm}$ (depending on lens + focus position) / IP 67 (NEMA 4)
Weight	195 g, lens included
Shock / Vibration ³⁾	IEC 60068-2-27 (25G and 50G) / IEC 60068-2-6 (sinus shaped), IEC 60068-2-64 (broadband noise)
Tripod mount	$\frac{1}{4}$ - 20 UNC
Power supply	via USB
Scope of supply (Standard)	<ul style="list-style-type: none"> • USB camera, 1 lens included • USB cable (1 m) • Table tripod • Standard PIF with cable (1 m), terminal block included • Software package optris® PIX Connect • Aluminum case

¹⁾ Accuracy effective starting at 150 °C

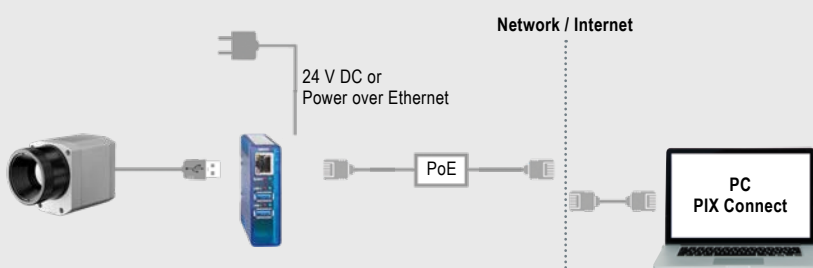
²⁾ The additional measuring range is not available for 72° HFOV

³⁾ For further details see operator's manual.

Dimensions



Process integration

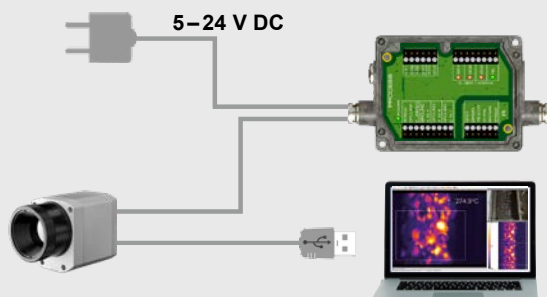


optris® USB-Server Gigabit 2.0

- 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.global/usb-server-gigabit

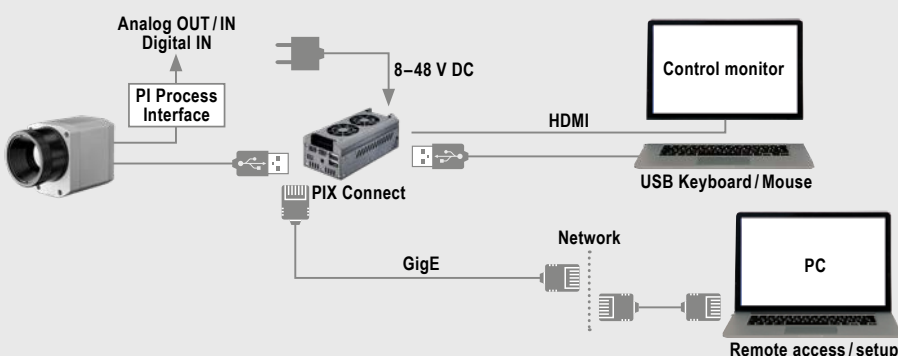


optris® Industrial Prozess Interface

- 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.global/thermal-imager-optris-pi160



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.global/pi-netbox