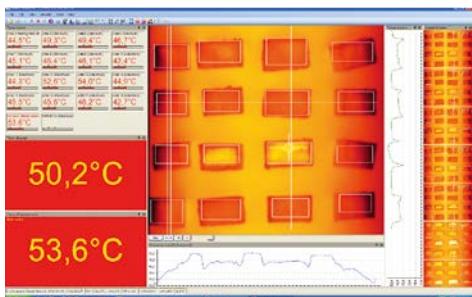
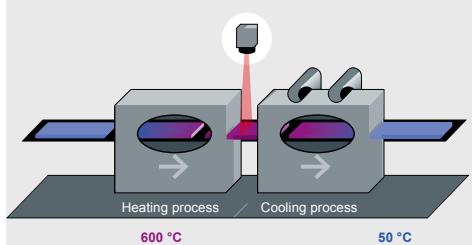


Thermal imaging solution for the glass industry



Infrared camera with line scan mode



For further information on non-contact temperature measurement in the glass industry, please visit www.optris.com/temperature-measurement-glass-industry

Features:

- Line scan function through license-free analysis software optris® PIX Connect
- Compact in size of 46 x 56 x 76 - 100 mm
- Frame rate of 80 Hz
- Withstands ambient temperatures of up to 70 °C without additional cooling

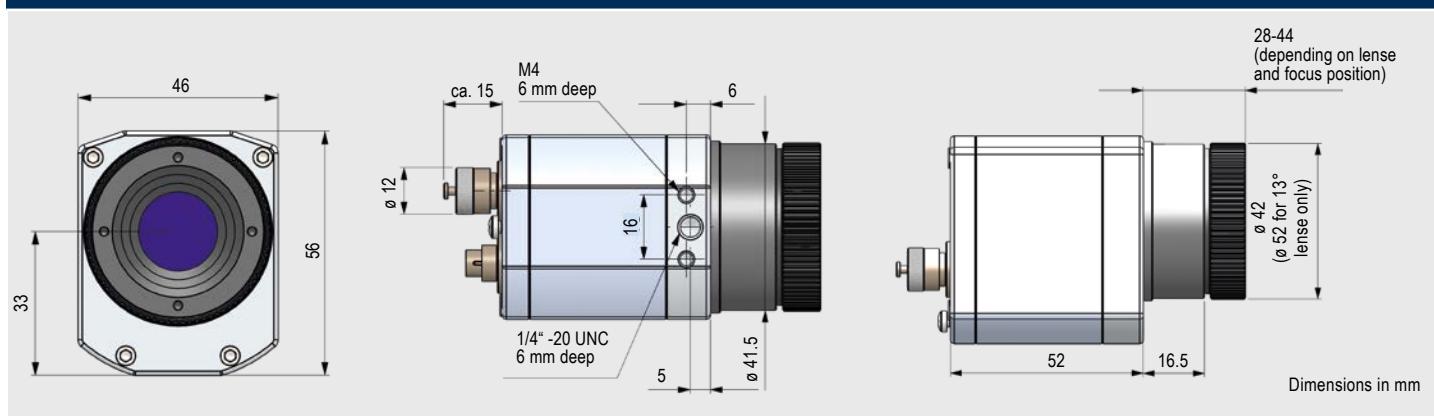
Technical specifications

Optical resolution	382 x 288 pixels
Detector	FPA, uncooled (25 µm x 25 µm)
Spectral range	7.9 µm
Measurement ranges	200 ... 1500 °C / 150 ... 900 °C
Sighting range	0 ... 250 °C
Frame rate	80 Hz/ switchable to 27 Hz
Optics (FOV)	13° x 10° / f = 41 mm or 29° x 22° / f = 18.7 mm or 53° x 40° / f = 10.5 mm or 80° x 56° / f = 7.7 mm Max. FOV: 98° / 478 pixels (diagonal scanline / 80° optics)
Thermal sensitivity (NETD) at T _{Obj} = 650 °C	130 mK
Accuracy	±2 °C 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 output
Process interface (PIF), industrial	2x 0 – 10 V input, digital input (max. 24 V), 3x 0/4 – 20 mA outputs, 3x relay (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 also as high temperature USB cable (180 or 250 °C)
Ambient temperature	0 ... 70 °C
Storage temperature	-40 ... 85 °C
Relative humidity	20 – 80 %, non-condensing
Enclosure (size / rating)	46 x 56 x 76 - 100 mm (depending on lens + focus position) / IP 67 (NEMA 4)
Weight	320 g, incl. lens
Shock / Vibration ¹⁾	IEC 60068-2-27 (25G and 50G) / IEC 60068-2-6 (sinus shaped), IEC 60068-2-64 (broadband noise)
Tripod mount	1/4 – 20 UNC
Power supply	via USB
Scope of supply (standard)	<ul style="list-style-type: none"> • USB camera with 1 lens • USB cable (1 m) • Table tripod • PIF cable (1 m) incl. terminal block • Software package optris® PIX Connect • Hard transport case

¹⁾ For more details see operator's manual.

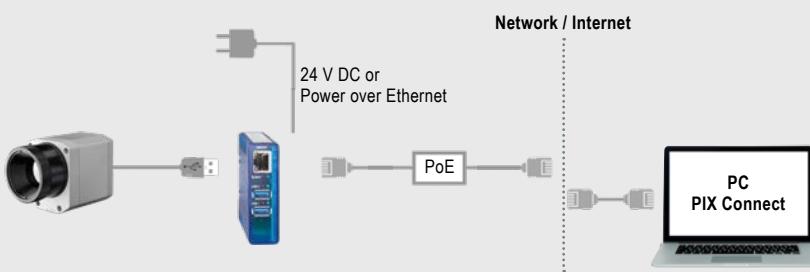
optris® PI 450 G7

Dimensions



Dimensions in mm

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

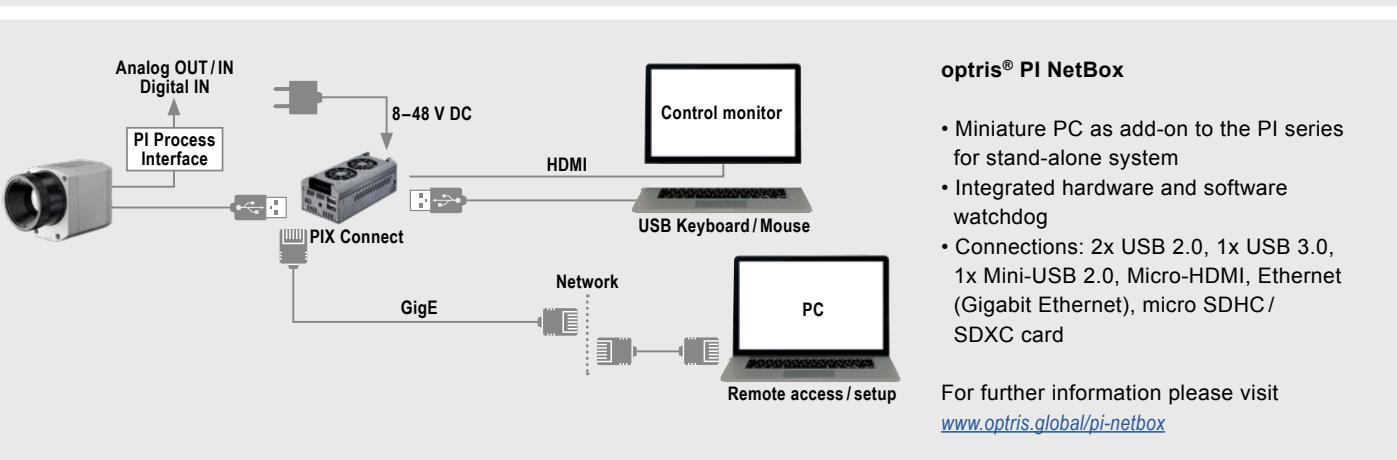
For further information please visit
www.optris.global/usb-server-gigabit



optris® Industrial 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 relais
1 fail-safe relay

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