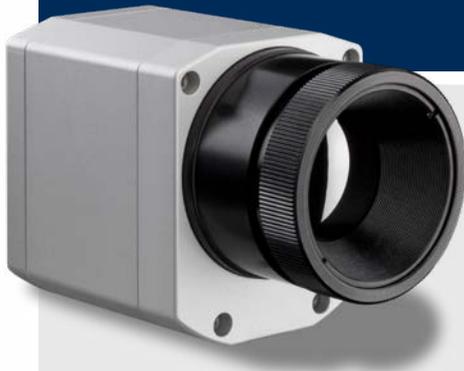
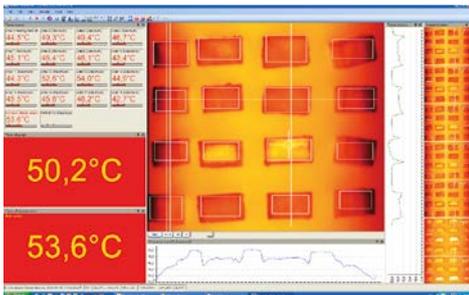


High-resolution thermal imaging solution for the glass industry

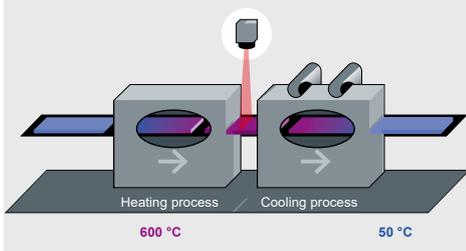


Features:

- Line scan function through license-free analysis software optris PIX Connect
- Compact in size: 46 x 56 x 76 - 100 mm
- Frame rate of up to 125 Hz
- Max. scan angle of 111° with 800 pixels per line



Infrared camera with line scan mode



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

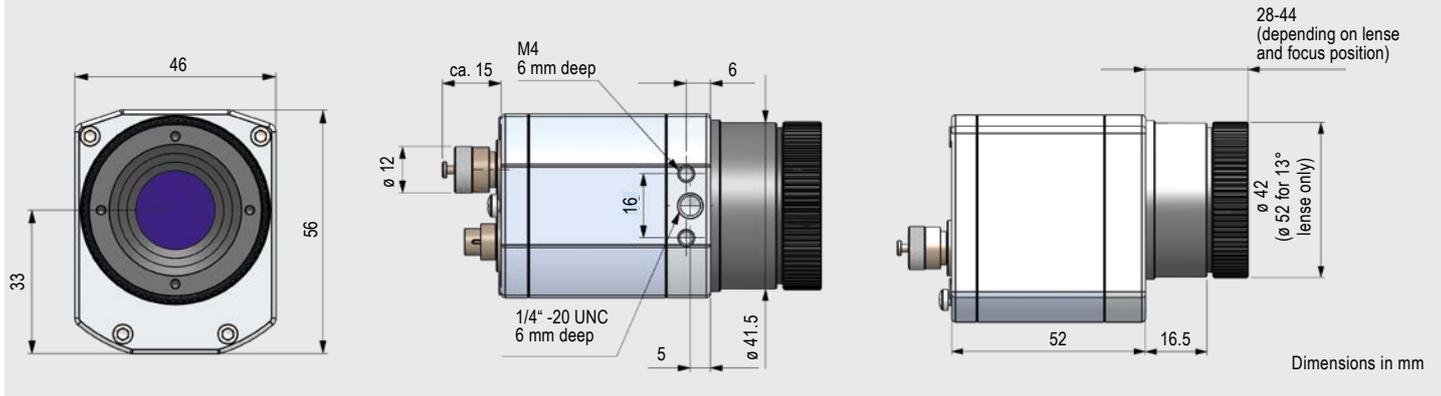
Technical specifications

Optical resolution	640 x 480 pixels
Detector	FPA, uncooled (17 µm x 17 µm)
Spectral range	7.9 µm
Measurement ranges	200 ... 1500 °C / 150 ... 900 °C
Sighting range	0 ... 250 °C
Frame rate	32 Hz / 125 Hz @ 640 x 120 pixels
Optics (FOV)	15° x 11° (f = 41.5 mm) 33° x 25° (f = 18.7 mm) 60° x 45° (f = 10.5 mm) 90° x 64° (f = 7.7 mm) max. FOV: 111° / 800 pixels (diagonal scan line / 90° lens)
Thermal sensitivity (NETD) at T _{Obj} = 650 °C	80 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 V 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 ... 50 °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	269 - 340 g (depending on 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	¼ – 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 • Rugged outdoor case

¹⁾ For more details see operator's manual

optris PI 640i G7

Dimensions



Process integration

Diagram illustrating the integration of the optris USB Server Gigabit 2.0. The camera is connected to a network switch via a PoE (Power over Ethernet) cable. The switch is powered by a 24 V DC or Power over Ethernet source. The switch is also connected to a PC labeled 'PC PIX Connect' via a network cable. A 'Network / Internet' connection is also shown.

optris USB Server Gigabit 2.0

- Network connection via Gigabit Ethernet
- Full TCP/IP support incl. routing and DNS
- Two independent USB ports
- Power over 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

Diagram illustrating the integration of the optris Industrial process interface. The camera is connected to a green industrial interface board. The board is powered by a 5-24 V DC source. The board is also connected to a laptop displaying a process image via a USB cable.

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 relay, 1 fail-safe relay

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

Diagram illustrating the integration of the optris PI NetBox. The camera is connected to a PI Process Interface board. The board is powered by an 8-48 V DC source. The board is connected to a 'Control monitor' via HDMI and to a 'USB Keyboard / Mouse' via USB. The board is also connected to a 'PC' via GigE (Gigabit Ethernet) for 'Remote access / setup'.

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