



## Thermography in VGA resolution

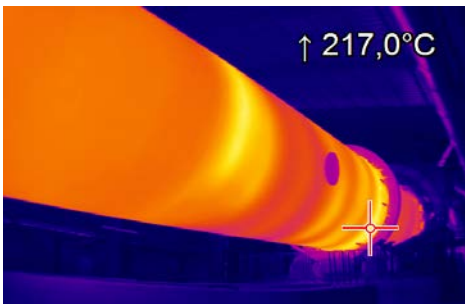
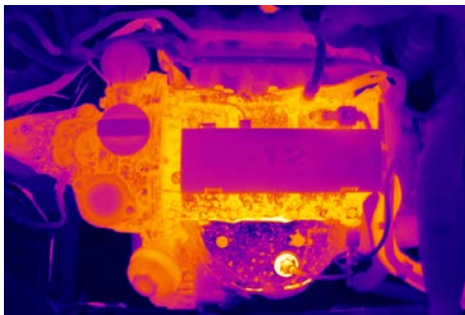
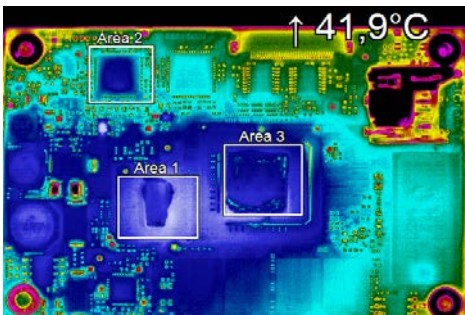


### Features:

- 640 x 480 pixels
- Superb thermal sensitivity of 40 mK
- Radiometric video recording with 32 Hz / 125 Hz in subframe mode
- Interchangeable lenses: 15°, 33°, 60° and 90°
- Licence-free analysis software and complete SDK inclusive

### Technical specifications

Optical resolution	640 x 480 pixels
Detector	FPA, uncooled (17 µm x 17 µm)
Spectral range	8 – 14 µm
Temperature ranges	-20 ... 100 °C, 0 ... 250 °C, (20) 150 ... 900 °C <sup>1)</sup> optional temperature range: 200 ... 1500 °C
Frame rate	32 Hz / 125 Hz @ 640 x 120 pixels
Optics (FOV)	15° x 11° FOV / f = 41.5 mm or 33° x 25° FOV / f = 18.7 mm or 60° x 45° FOV / f = 10.5 mm or 90° x 64° FOV / f = 7.7 mm
Thermal sensitivity (NETD)	40 mK
Accuracy	±2 °C or ±2 %, whichever is greater
PC interface	USB 2.0 / optional USB 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)
Weight	269 - 340 g (depending on lens)
Shock / Vibration <sup>2)</sup>	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	<ul style="list-style-type: none"> <li>• USB camera with 1 lens</li> <li>• USB cable (1 m)</li> <li>• Table tripod</li> <li>• Standard PIF with cable (1 m) and terminal block</li> <li>• Software package optris PIX Connect</li> <li>• Hard transport case</li> </ul>



For further information as well as the  
product configurator, please visit:

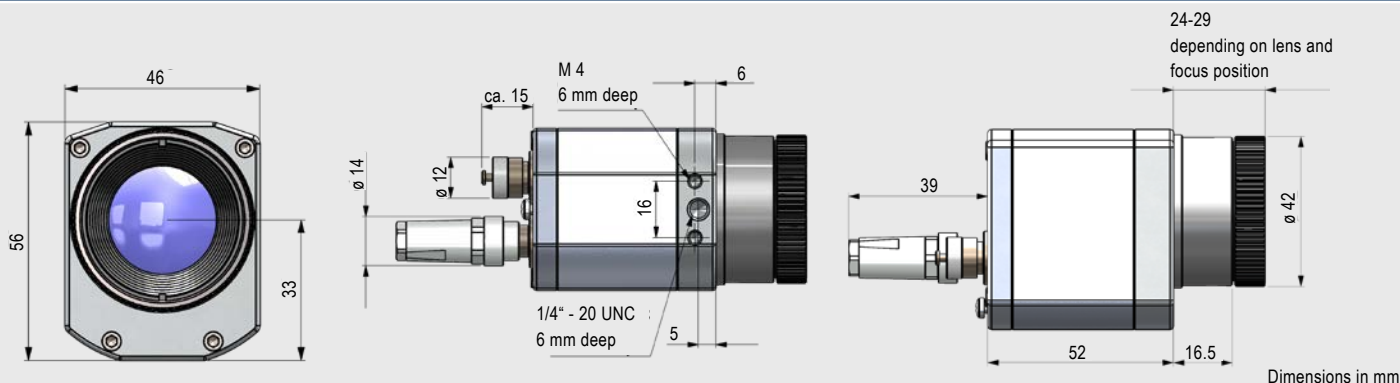
[www.optris.global/thermal-imager-optris-pi-640](http://www.optris.global/thermal-imager-optris-pi-640)

<sup>1)</sup> Accuracy effective starting at 150 °C

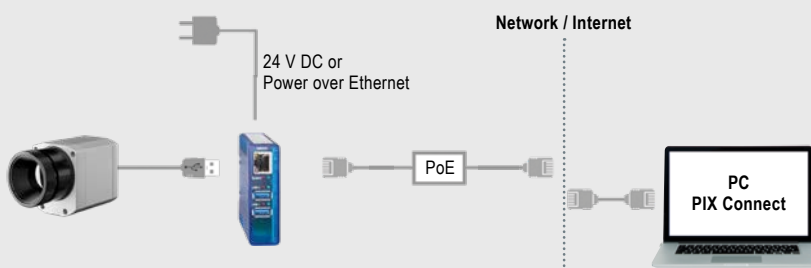
<sup>2)</sup> For more details see operator's manual

# optris PI 640i

## Dimensions



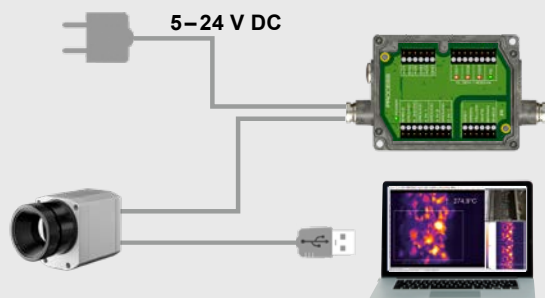
## Process integration



### optris USB Server Gigabit 2.0

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

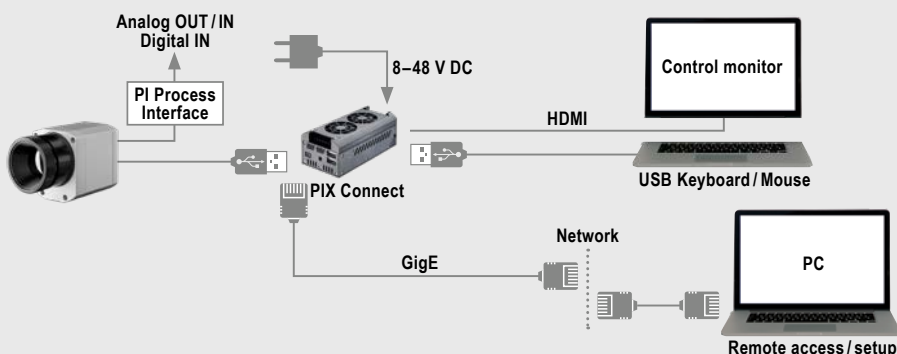
For further information please visit [www.optris.global/usb-server-gigabit](http://www.optris.global/usb-server-gigabit)



### 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 relay, 1 fail-safe relay

For further information please visit [www.optris.global/neu-industrial-process-interface](http://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](http://www.optris.global/pi-netbox)