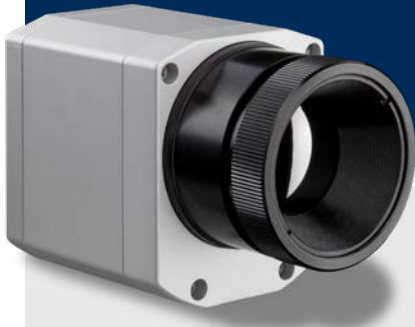


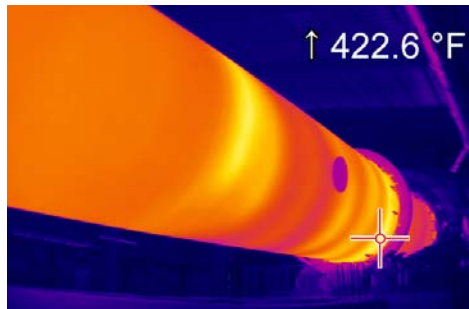
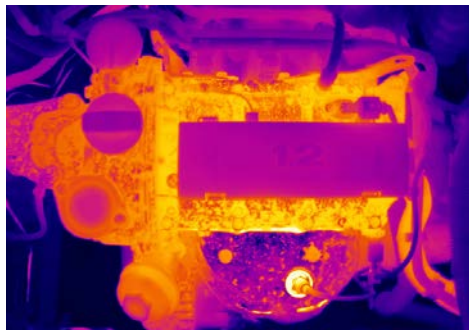
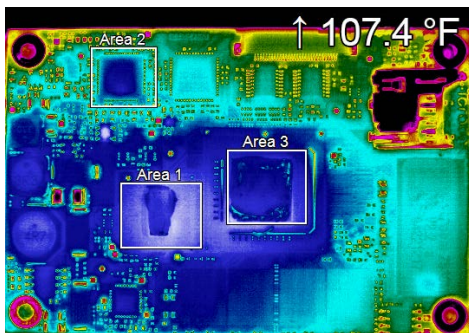


Thermography  
in VGA resolution



Features:

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



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

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

Technical specifications

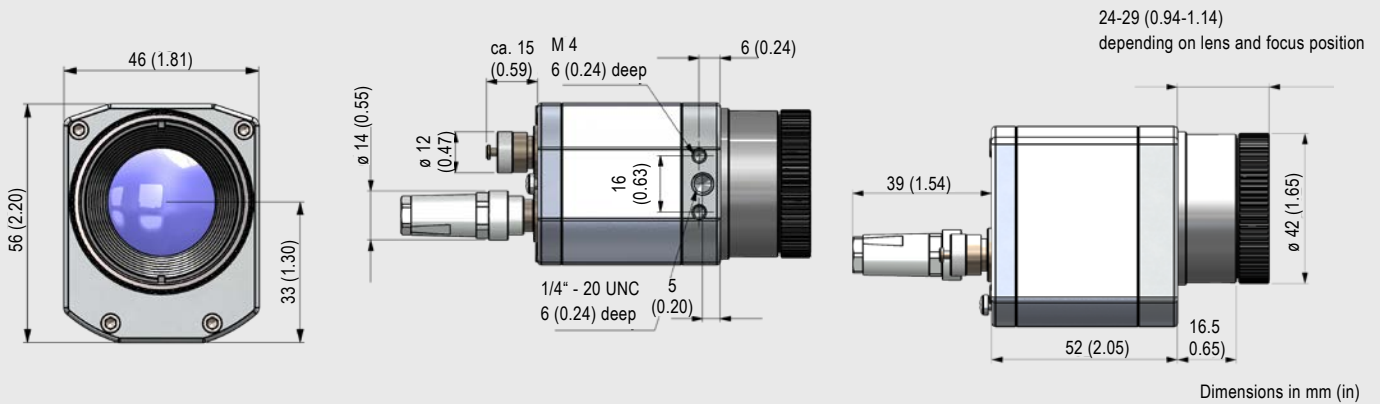
Optical resolution	640 x 480 pixel
Detector	FPA, uncooled (17 µm x 17 µm)
Spectral range	8 – 14 µm
Temperature ranges	-20 ... 100 °C (-4 ... 212 °F) 0 ... 250 °C (32 ... 482 °F) (20) 150 ... 900 °C ([68] 302 ... 1652 °F) <sup>1)</sup> optional temperature range: 200 ... 1500 °C (392 ... 2732 °F)
Frame rate	32 Hz / 125 Hz @ 640 x 120 pixels
Optics (FOV)	15° x 11° FOV / f=41.5 mm (f=1.6 in) or 33° x 25° FOV / f = 18.7 mm (f=0.7 in) or 60° x 45° FOV / f = 10.5 mm (f=0.4 in) or 90° x 66° FOV / f = 7.7 mm (f=0.3 in)
Thermal sensitivity (NETD)	75 mK
Accuracy	±2 °C or ±2 % (±3.6 °F or ±2 %), whichever is greater
PC interface	USB 2.0 / optional USB to Gig* (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 (standard) / 5 m / 10 m / 20 m (3.3 / 16.4 / 32.8 / 65.6 ft) 5 and 10 m (16.4 and 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)	46 x 56 x 76 - 100 mm (1.8 x 2.2 x 3.0 - 3.9 in) (depending on lens + focus position) / IP 67 (NEMA 4)
Weight	269 - 340 g (10.59 - 13.38 oz), 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	USB powered
Scope of supply	<ul style="list-style-type: none"> <li>• USB camera with 1 lens</li> <li>• USB cable (1 m [3.3 ft])</li> <li>• Table tripod</li> <li>• Standard PIF with cable (1 m [3.3 ft]) and terminal block</li> <li>• Software package optris PIX Connect</li> <li>• Hard transport case</li> </ul>

<sup>1)</sup> Accuracy effective starting at 150 °C (302 °F)

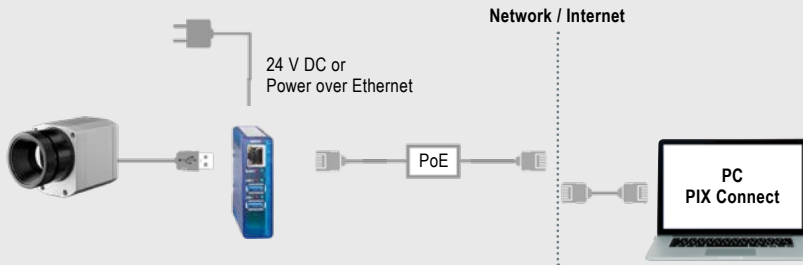
<sup>2)</sup> For more details see operator's manual

# optris PI 640

## Dimensions



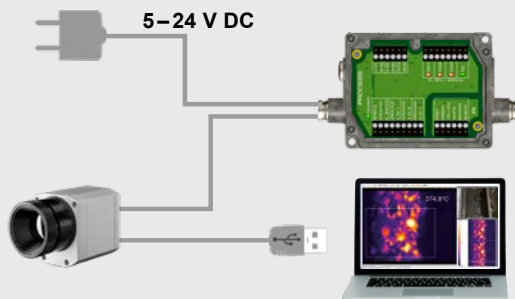
## Process integration



### 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<sub>RMS</sub>
- Remotely configurable via web based management

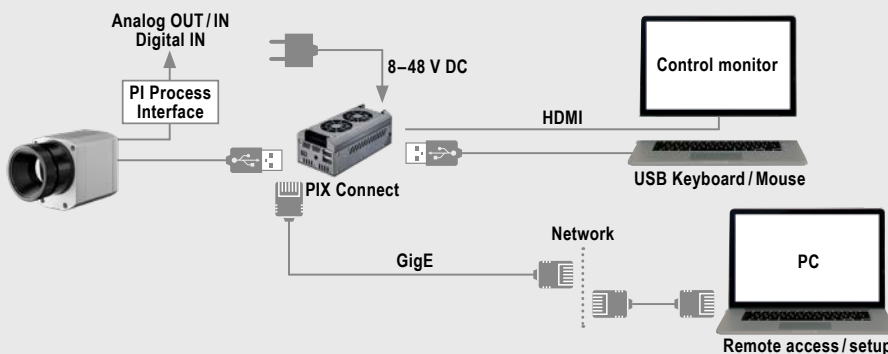
For further information please visit [www.optris.com/usb-server-industry-isochron](http://www.optris.com/usb-server-industry-isochron)



### 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](http://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](http://www.optris.com/pi-netbox)