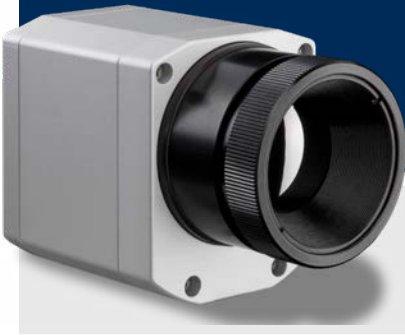
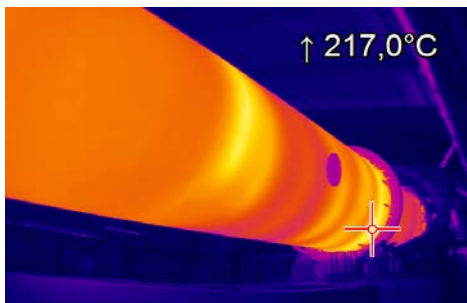
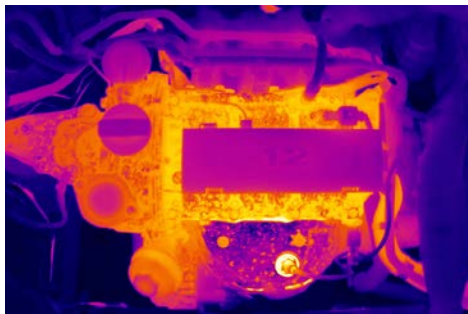
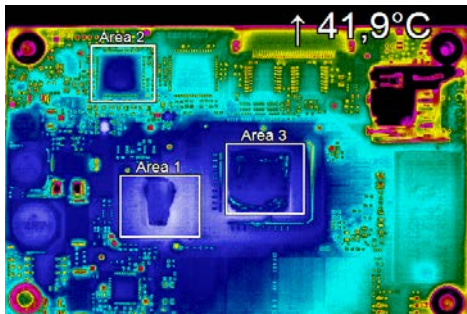


Thermography in VGA resolution



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



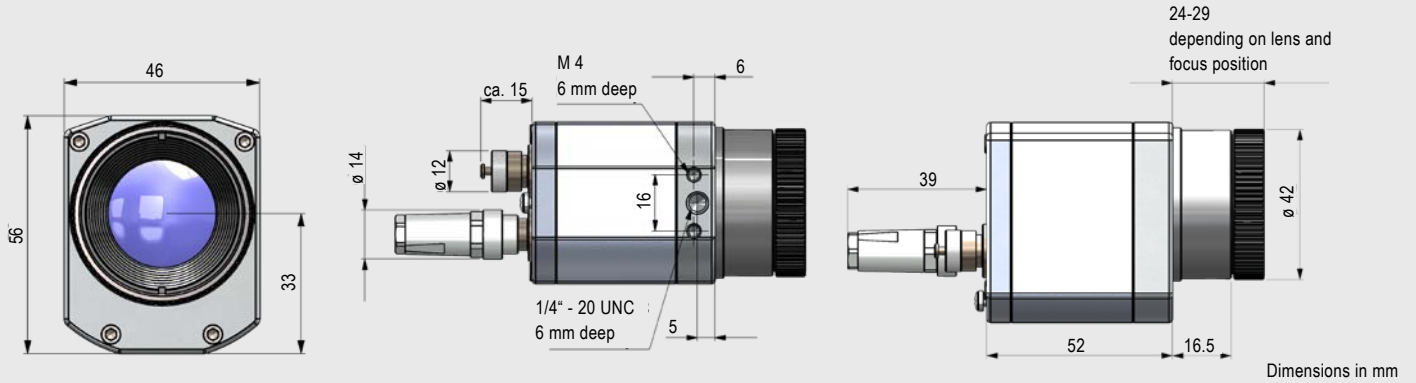
Technical specifications

| | |
|-------------------------------------|---|
| 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 ¹⁾ 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 ²⁾ | 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"> • USB camera with 1 lens • USB cable (1 m) • Table tripod • Standard PIF with cable (1 m) and terminal block • Software package optris PIX Connect • Hard transport case |

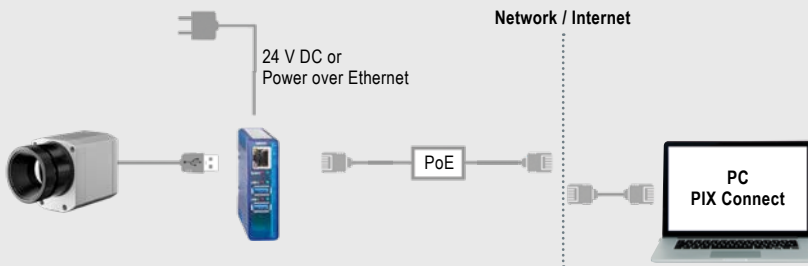
¹⁾ Accuracy effective starting at 150 °C.

optris PI 640i

Dimensions

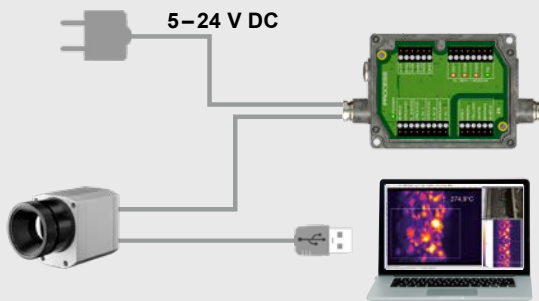


Process integration



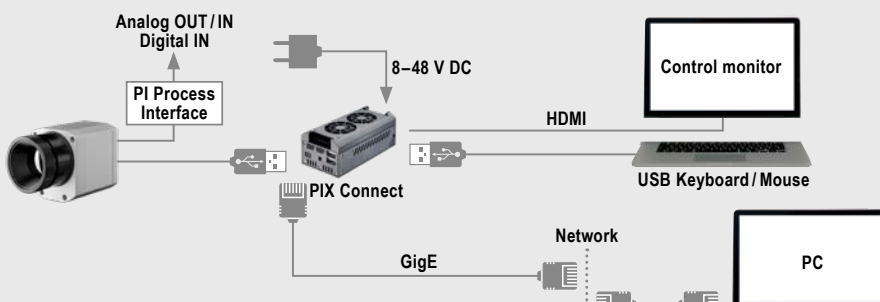
optris USB Server Gigabit 2.0

- 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_{RMS}
- Remotely configurable via web based management



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



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