**TECHNICAL DATA**

**Thermography in VGA resolution**

**Features:**
- 640 x 480 pixels
- Radiometric video recording with 32 Hz / 126 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
  - 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
  - 33° x 25° FOV / f = 18.7 mm
  - 60° x 45° FOV / f = 10.5 mm
  - 90° x 66° FOV / f = 7.7 mm
- **Thermal sensitivity (NETD)**: 75 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**
  - 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**

- USB camera with 1 lens
- USB cable (1 m)
- Table tripod
- Standard PIF with cable (1 m) and terminal block
- Software package optris PIXI Connect
- Hard transport case

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1) Accuracy effective starting at 150 °C
2) The additional measuring range is not available for 90° optics
3) For more details see operator’s manual

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

www.optris.global/thermal-imager-optris-pi-640
**Dimensions**

![Dimensions diagram]

**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\textsubscript{RMS}
- 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)