

## Compact spot finder IR camera



Xi 410 infrared imagers for remote condition monitoring

### Features:

- Industrial imager with 384 x 240 pixels for exact temperature measurement of -20 °C ... 900 °C
- Small sized rugged camera with motorized focus
- Autonomous operation with auto hot spot finder and direct analog or alarm output – ideal for condition monitoring and OEM use
- Optional stackable industrial process interface with up to 9 analog or alarm outputs
- Software with extensive analysis features and web server capability included

### Technical Specifications

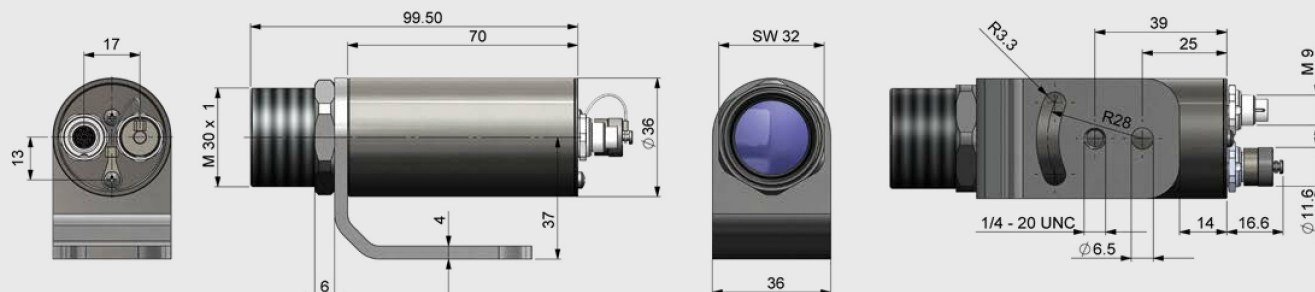
|                                               |                                                                                                                                                                                                                                                                                                 |                                                        |
|-----------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------|
| Optical resolution                            | 384 x 240 pixels                                                                                                                                                                                                                                                                                |                                                        |
| Detector                                      | FPA, uncooled (17 µm pitch)                                                                                                                                                                                                                                                                     |                                                        |
| Spectral range                                | 8 – 14 µm                                                                                                                                                                                                                                                                                       |                                                        |
| Temperature ranges                            | -20 ... 100 °C, 0 ... 250 °C, (20) 150 ... 900 °C <sup>1)</sup>                                                                                                                                                                                                                                 |                                                        |
| Optical resolution / Frame rate               | <b>Ethernet:</b> 384 x 240 pixels @ 25 Hz<br><b>USB:</b> 384 x 240 pixels @ 4 Hz                                                                                                                                                                                                                | <b>autonomous operation:</b> 384 x 240 pixels @ 1.5 Hz |
| Optics (FOV)                                  | 18° x 12° (f = 20)<br>29° x 18° (f = 13)<br>53° x 31° (f = 8)<br>80° x 44° (f = 6)                                                                                                                                                                                                              |                                                        |
| Focus                                         | Manual motor focus                                                                                                                                                                                                                                                                              |                                                        |
| Optical resolution (D:S)                      | 390:1 (18° optics)                                                                                                                                                                                                                                                                              |                                                        |
| Thermal sensitivity (NETD)                    | 80 mK                                                                                                                                                                                                                                                                                           |                                                        |
| Accuracy                                      | ±2 °C or ±2 %, whichever is greater                                                                                                                                                                                                                                                             |                                                        |
| PC interface                                  | Fast Ethernet / USB 2.0                                                                                                                                                                                                                                                                         |                                                        |
| Direct Output / Input                         | 1x analog output (0/4-20 mA) / 1x input (analog or digital); electrically isolated                                                                                                                                                                                                              |                                                        |
| Process interface (PIF), industrial           | 3x analog outputs (0/4-20 mA or 0-10 V) and 3x alarm outputs (relais) / 3x inputs (analog or digital) / fail-safe (LED and relay) stackable up to 3 PIFs; electrically isolated                                                                                                                 |                                                        |
| Cable length                                  | <b>Ethernet:</b> 1 m (standard), 5 m, 10 m, 20 m (up to 100 m)<br><b>USB:</b> 1 m, 3 m, 5 m                                                                                                                                                                                                     |                                                        |
| Ambient temperature                           | 0 °C ... 50 °C                                                                                                                                                                                                                                                                                  |                                                        |
| Enclosure (size / rating)                     | Ø 36 mm x 100 mm (M30x1 thread) / IP 67 (NEMA 4)                                                                                                                                                                                                                                                |                                                        |
| Weight (without mounting bracket)             | 216 - 220 g, depending on lens                                                                                                                                                                                                                                                                  |                                                        |
| Shock <sup>2)</sup> / Vibration <sup>2)</sup> | IEC 60068-2-27 (25G and 50G) / IEC 60068-2-6 (sinus shaped), IEC 60068-2-64 (broadband noise)                                                                                                                                                                                                   |                                                        |
| Power supply                                  | 5 - 30 V DC / PoE / USB                                                                                                                                                                                                                                                                         |                                                        |
| Scope of supply                               | <ul style="list-style-type: none"> <li>• Process imager Xi 410</li> <li>• Ethernet/ PoE cable (1 m)/ USB cable (1 m)</li> <li>• IN/ OUT cable incl. terminal block (1 m)</li> <li>• Mounting bracket with tripod thread, mounting nut</li> <li>• Software package optris PIX Connect</li> </ul> |                                                        |

<sup>1)</sup> Accuracy statement effective from 150 °C

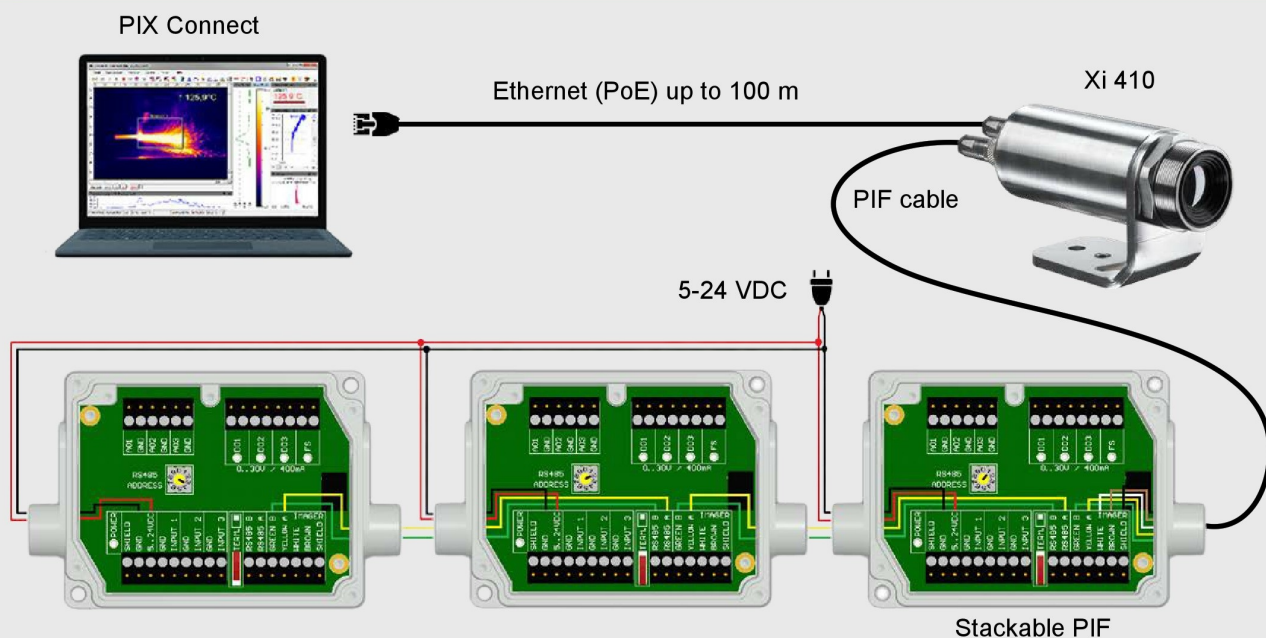
<sup>2)</sup> For more details see operator's manual

# optris Xi 410

## Dimensions in mm



## Operation with PIX Connect software and 3 stackable PIFs



## Autonomous operation (without PC) with up to 3 analog outputs/ alarm outputs

