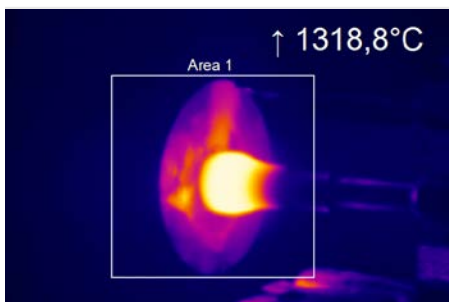
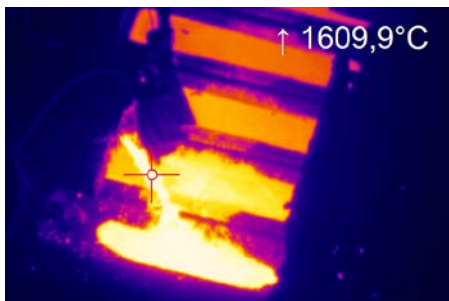




Compact short wavelength spot finder IR camera for metal applications

Features:

- Small sized rugged camera with motorized focus
- Wide measurement range from 450 °C to 1800 °C without sub-ranges
- Highly dynamic CMOS detector with 396 x 300 pixels resolution
- Autonomous operation with auto hot spot finder and direct analog or alarm output
- Software with extensive analysis features and web server capability included



Technical Specifications

| | | |
|--|--|---|
| Optical resolution | 396 x 300 pixels | |
| Detector | CMOS (15 µm pitch) | |
| Spectral range | 0.85 – 1.1 µm | |
| Temperature ranges | 450 ¹⁾ °C ... 1800 °C (20 Hz mode) | |
| Optical resolution / Frame rate | Ethernet: 396 x 300 pixels @ 20 Hz USB: 132 x 100 pixels @ 20 Hz | autonomous operations: 132 x 100 pixels @ 20 Hz |
| Optics (FOV) | 28° x 21° (f = 12 mm) 14° x 10° (f = 25 mm) 7° x 5° (f = 50 mm) | |
| Focus | Motorized focus | |
| Thermal sensitivity (NETD) ²⁾ | < 2 K (< 900 °C) / < 4 K (< 1400 °C) | |
| Accuracy (at T _{Amb} = 23 ±5°C) | For object temperature < 1400 °C: ±1 % of reading for 20 Hz For object temperature < 1600 °C: ±2 % of reading for 20 Hz | |
| PC interface | Fast Ethernet / USB 2.0 / RS485 | |
| 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 (relays) / 3x inputs (analog or digital) / fail-safe (LED and relay) stackable up to 3 PIFs; electrically isolated | |
| Cable length | Ethernet: 1 m (standard), 5 m, 10 m, 20 m (up to 100 m) USB: 1 m, 3 m, 5 m | |
| Ambient temperature | 0 °C ... 50 °C | |
| Enclosure (size / rating) | Ø 36 mm x 112 – 126.5 mm, depending on lens (M30x1 thread) / IP 67 (NEMA 4) | |
| Weight (without mounting bracket) | 270 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) | |
| Power supply | 8 - 30 V DC / PoE / USB | |
| Scope of supply | <ul style="list-style-type: none"> • Process imager Xi 1M • Ethernet / PoE cable (1 m) / USB cable (1 m) • IN/ OUT cable incl. terminal block (1 m) • Mounting bracket with tripod thread, mounting nut • Software package optris PIX Connect | |

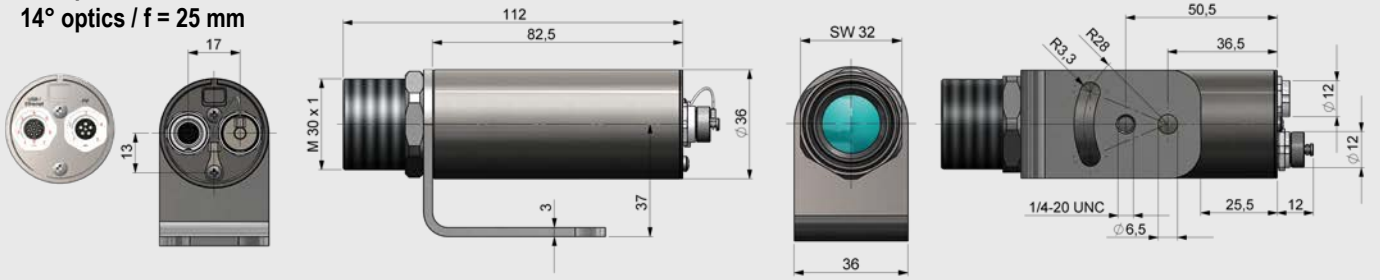
¹⁾ Lens with focal length f = 50 mm has an elevated starting temperature of +525 °C

²⁾ Specified NETD value applies to all frequencies

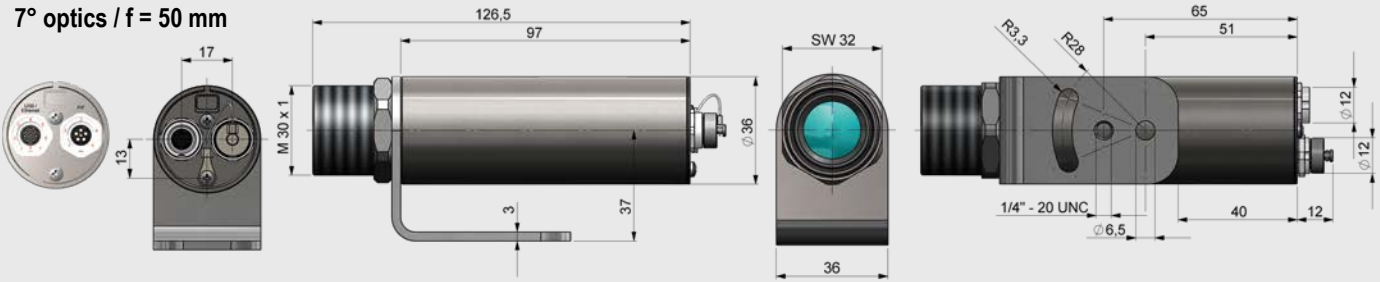
optris Xi 1M

Dimensions in mm

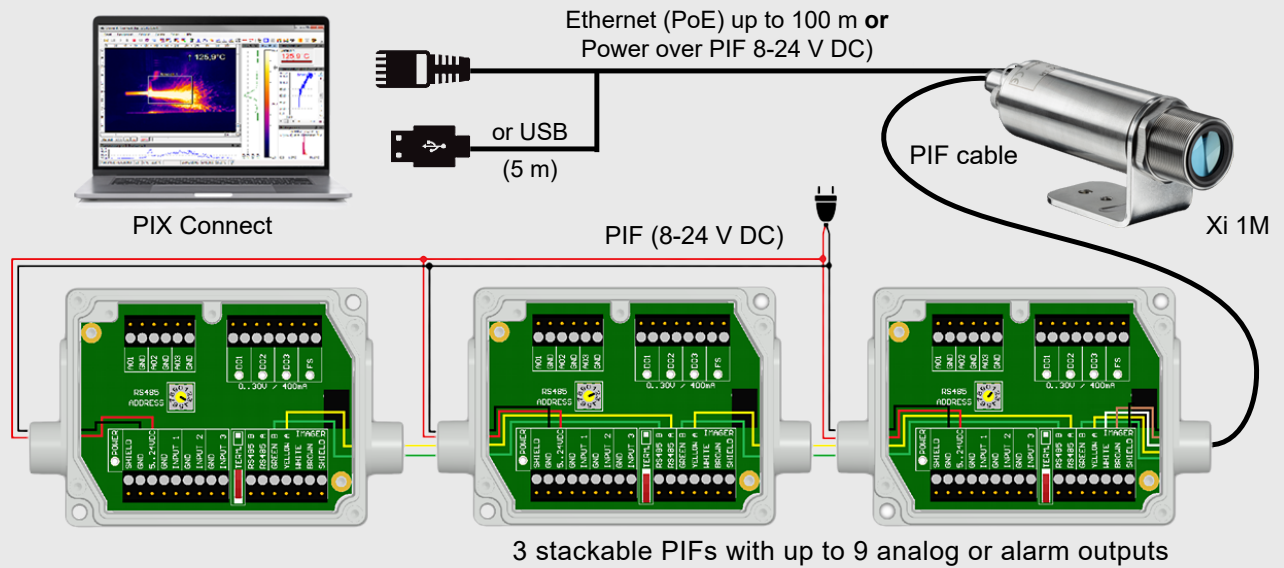
28° optics / f = 12 mm
14° optics / f = 25 mm



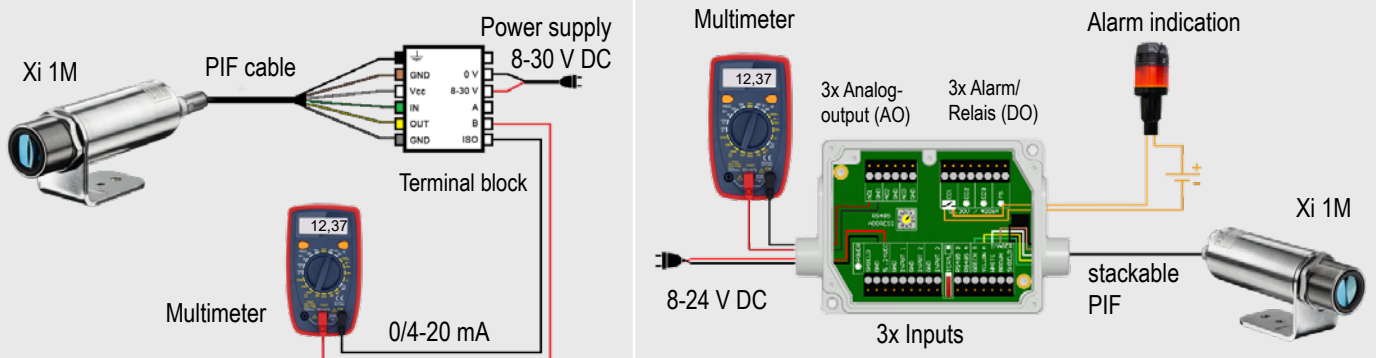
7° optics / f = 50 mm



Operation with PIX Connect software and 3 stackable PIFs



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



Accessories

ACXI1MAPL
(Air purge unit) +
ACXIAPLAB
(Mounting bracket)



ACXIMW
(Water cooled housing)



ACXIS
(Shutter) +
ACXIAPLAB
(Mounting bracket)

