



# Xi 80

Spot finder IR camera

when temperature matters

**Compact spot finder  
IR camera**

**Features:**

- **Industrial imager with 80 x 80 pixels** for exact temperature measurement of  $-20^{\circ}\text{C}$  to  $900^{\circ}\text{C}$  ( $-4^{\circ}\text{F}$  to  $1652^{\circ}\text{F}$ )
- Small sized rugged camera with motorized focus
- Distance-to-spot-ratio up to 190:1 with sighting capabilities
- Autonomous operation with automatic spot finder and direct analog output – ideal for OEM use
- Optional stackable industrial process interface with up to 9 analog or alarm outputs
- Extensive ready-to-use package for an attractive price – including versatile image processing software and connection cables



**Technical specifications**

Optical resolution	80 x 80 pixels
Detector	FPA, uncooled (34 $\mu\text{m}$ x 34 $\mu\text{m}$ )
Spectral range	8 – 14 $\mu\text{m}$
Temperature ranges	$-20^{\circ}\text{C}$ ... $100^{\circ}\text{C}$ ( $-4^{\circ}\text{F}$ ... $212^{\circ}\text{F}$ ), $0^{\circ}\text{C}$ ... $250^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ ... $482^{\circ}\text{F}$ ), (20 [68]) $150^{\circ}\text{C}$ ... $900^{\circ}\text{C}$ <sup>1)</sup> ( $302^{\circ}\text{F}$ ... $1652^{\circ}\text{F}$ ) <sup>1)</sup>
Frame rate	50 Hz
Optics (FOV)	12° (f = 12.7 [0.50]), 30° (f = 5.1 [0.20]), 55° (f = 3.1 [0.12]), 80° (f = 2.3 [0.09])
Focus	Manual motor focus
Optical resolution D:S	190:1 (12° optics)
Thermal sensitivity (NETD)	100 mK
Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ ( $\pm 3.6^{\circ}\text{F}$ or $\pm 2\%$ ), whichever is greater
PC interface	USB 2.0 / Ethernet (100 Mbit/s) / PoE / RS 485 <sup>2)</sup>
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 (USB)	USB: 1 m (3.3 ft) (standard), 3 m (9.8 ft), 5 m 16.4 ft), 10 m (32.8 ft), 20 m (65.6 ft) Ethernet / RS485: 100 m (328.1 ft)
Ambient temperature	$0^{\circ}\text{C}$ to $50^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ to $122^{\circ}\text{F}$ )
Enclosure (size / rating)	$\varnothing$ 36 mm x 90 mm ( $\varnothing$ 1.42 in x 3.54 in) (M30x1 thread) / IP 67 (NEMA 4)
Weight (without mounting bracket)	201 - 210 g, (7.1 - 7.4 oz) depending on lens
Shock / Vibration <sup>3)</sup>	IEC 60068-2-27 (25G and 50G) / IEC 60068-2-6 (sinus shaped), IEC 60068-2-64 (broadband noise)
Power supply	USB / PoE / 5–30 VDC
Scope of supply	<ul style="list-style-type: none"> <li>• Process imager Xi</li> <li>• USB cable (1 m [3.3 ft])</li> <li>• Cable for output/input (1 m) incl. terminal block</li> <li>• Mounting bracket with nut</li> <li>• Software package optris PIX Connect</li> </ul>

<sup>1)</sup> Accuracy statement effective from  $150^{\circ}\text{C}$

<sup>2)</sup> Direct out- and inputs are not available while using the RS485 interface

<sup>3)</sup> For more details see operator's manual