



# Xi 400

Spot finder IR camera

when temperature matters

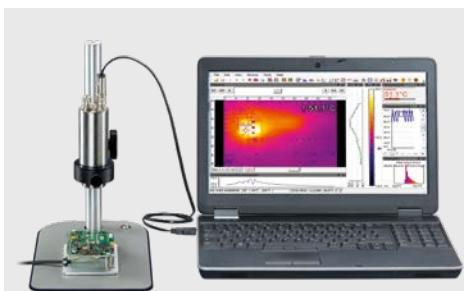
# optris Xi 400

## TECHNICAL DATA

### Compact spot finder IR camera

#### Features:

- Industrial imager with 382 x 288 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
- Superb distance-to-spot-size-ratio up to 390:1 with sighting capabilities
- 80 Hz frame rate for monitoring of fast thermal processes
- Extensive ready-to-use package for an affordable price – including versatile image processing software with line-scan feature and connection cables



Xi400 Microscope optics lens kit

Type	Xi 400
Optical resolution	382 x 288 pixels
Detector	FPA, uncooled (17 $\mu\text{m}$ x 17 $\mu\text{m}$ pitch)
Spectral range	8 – 14 $\mu\text{m}$
Temperature ranges	$-20 \dots 100^{\circ}\text{C}$ ( $-4 \dots 212^{\circ}\text{F}$ ), $0 \dots 250^{\circ}\text{C}$ ( $32 \dots 482^{\circ}\text{F}$ ), (20 [68]) $150 \dots 900^{\circ}\text{C}^{1)}$ ( $302 \dots 1652^{\circ}\text{F}^{1)}$
Frame rate	80 / 27 Hz
Optics (FOV)	$18^{\circ} \times 14^{\circ}$ ( $f = 20$ [0.79]), $29^{\circ} \times 22^{\circ}$ ( $f = 12.7$ [0.50]), $53^{\circ} \times 38^{\circ}$ ( $f = 7.7$ [0.30]), $80^{\circ} \times 54^{\circ}$ ( $f = 5.7$ [0.22])
Microscope optics (FOV)	$18^{\circ} \times 14^{\circ}$ ( $f = 20$ ), smallest measuring spot (MFOV): 240 $\mu\text{m}$
Focus	Manual motor focus
Optical resolution (D:S)	390:1 (18° optics)
Thermal sensitivity (NETD)	80 mK
Accuracy	$\pm 2^{\circ}\text{C}$ or $\pm 2\%$ ( $\pm 4^{\circ}\text{F}$ or $\pm 2\%$ ), whichever is greater
PC interface	USB 2.0 / optional USB to GigE (PoE) conversion
Process interface (PIF), standard	0–10 V input, digital input (max. 24 V), 0–10 V output
Process interface (PIF), industrial	2 x 0–10 V inputs, digital input (max. 24 V), 3 x 0–10 V outputs, 3 x relay (0–30 V / 400 mA), fail-safe relay
Cable length (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)
Ambient temperature	$0^{\circ}\text{C}$ to $50^{\circ}\text{C}$ ( $32^{\circ}\text{F}$ to $122^{\circ}\text{F}$ )
Enclosure (size / rating)	$\varnothing 36 \text{ mm} \times 100 \text{ mm}$ ( $\varnothing 1.42 \text{ in} \times 3.9 \text{ in}$ ) (M30x1 thread) / IP 67 (NEMA 4)
Weight (without mounting bracket)	216 - 220 g, (7.6 - 7.7 oz) depending on lens
Shock <sup>2)</sup> / Vibration <sup>2)</sup>	IEC 60068-2-27 (25 G and 50 G); IEC 60068-2-6 (sinus shaped); IEC 60068-2-64 (broadband noise)
Power supply	USB
Scope of supply	<ul style="list-style-type: none"> <li>• Process imager Xi</li> <li>• USB cable (1 m [3.3 ft])</li> <li>• Standard PIF cable (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  $150^{\circ}\text{C}$  ( $302^{\circ}\text{F}$ )

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