optris
infrared thermometers

Xi 80
Spot finder IR camera

innovative infrared technology
Compact spot finder
IR camera

Features:
• Industrial imager with 80 x 80 pixels for exact temperature measurement of -20 °C to 900 °C
• Small sized rugged camera with motorized focus
• Superb distance-to-spot-size 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 µm pitch)
- Spectral range: 7.5 – 13 µm
- Temperature ranges: -20 °C ... 100 °C, 0 °C ... 250 °C, (20) 150 °C ... 900 °C
- Frame rate: 50 Hz
- Optics (FOV): 12° (f = 12.7), 30° (f = 5.1), 55° (f = 3.1), 80° (f = 2.3)
- Focus: Manual motor focus
- Optical resolution (D:S): 190:1 (12° optics)
- Thermal sensitivity (NETD): 100 mK
- Accuracy: ±2 °C or ±2 %, whichever is greater
- Repeatability: ±1 °C or ±1 %
- PC interface: USB 2.0 / Ethernet (100 Mbit/s) / PoE / RS 485
- Direct Output/Input: 1x analog output (0/4-20 mA) / 1x input (analog or digital); optically isolated
- Process interface (PIF), industrial: 3x analog outputs (0/4–20 mA or 0–10 V) or alarm OUT (relais) / 3x inputs (analog or digital) / fail-safe (LED and relay); stackable up to 3 PIFs; optically isolated
- Cable length: USB: 1 m (standard), 3m, 5 m, 10 m and 20 m
- Ethennet / RS485: 100 m
- Ambient temperature: 0 °C ... 50 °C
- Enclosure (size / rating): Ø 36 mm x 90 mm (M30x1 thread) / IP 67 (NEMA 4)
- Weight: 185 g
- Shock / Vibration: IEC 60068-2
- Power supply: USB / PoE / 5-28 VDC
- Scope of supply:
  • Process imager Xi
  • USB cable (1 m)
  • Cable for output/input (1 m) incl. terminal block
  • Mounting bracket with nut
  • Software package optris® PIX Connect

1) Accuracy statement effective from 150 °C
2) Direct out- and inputs are not available while using the RS485 interface
3) For more details see operator's manual