PI 400i COMPACT HIGH RESOLUTION INFRARED CAMERA
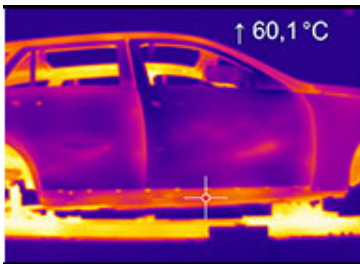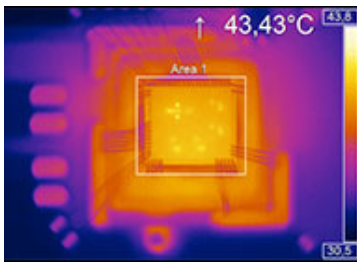
Specifications

Optical resolution	382 x 288 pixels
Detector	FPA, uncooled (17 µm x 17 µm)
Spectral range	8 – 14 µm
Temperature ranges	-20°C - 100°C (-4°F - 212°F), 0°C - 250°C (32°F - 482°F), (20) 150°C - 900°C[1] ([68] 302°F - 1652°F)[1] optional temperature range 200 - 1500°C (392 to 2732 °F)
Frame rate	80 Hz / switchable to 27 Hz
Optics (FOV)	18° x 14° / f = 20 mm [0.7 in] or 29° x 22° / f = 12.7 mm [0.5 in] or 53° x 38° / f = 7.7 mm [0.3 in] or 80° x 54° / f = 5.7 mm [0.2 in])
Thermal sensitivity (NETD)	40 mK mit 29° x 22° FOV / f = 0.9 40 mK mit 53° x 38° FOV / f = 0.9 40 mK mit 80° x 54° FOV / f = 0.9 0.6 K mit 18° x 14° FOV / f = 1.1
Accuracy	±2°C or ±2% (±3.6°F or ±2%), whichever is greater
PC interface	USB 2.0 / optional USB to GigE (PoE) interface
Process interface (PIF), standard	0 – 10 V input, digital input (max. 24 V), 0 – 10 V output
Process interface (PIF), industrial (optional)	2x 0-10 V input, digital input (max. 24 V), 2x 0/4-20 mA outputs, 3x relays (0-30 V/400 mA), fail-safe relay
Cable length (USB)	1 (standard) / 5 m / 10 m / 20 m (3.3 / 16.4 / 32.8 / 65.6 ft) 5 and 10 m (16.4 and 32.8 ft) also as HT cable (180 or 250°C [356 or 482°F])
Ambient temperature	0°C to 50°C (32°F to 122°F)
Storage temperature	-40 - 70°C (-40 to 140°F)
Relative humidity	20-80%, non-condensing
Enclosure (size/rating)	46 x 56 x 68 - 77 mm (1.81 x 2.2 x 2.68 - 3.03 in) (depending on lens + focus position) / IP 67 (NEMA 4), aluminum case
Weight (without mounting bracket)	237 – 251 g, (8.36 – 8.85 oz) depending on lens
Shock/Vibration [2]	IEC 60068-2-27 (25G and 50G) / IEC 60068-2-6 (sinus shaped) IEC 60068-2-64 (broadband noise)
Power Supply	Via USB
Scope of supply	• USB camera, incl. lens • USB cable (1 m [3.3 ft]) • Table tripod • PIF cable, incl. terminal block (1 m [3.3 ft]) • Software package

1) Accuracy for the (20°C/68°F) 150°C (302°F) - 900°C (1652°F) range effective starting at 150°C (302°F)
2) For more details see operator's manual

Features

- Smallest camera in its class 46 x 56 x 68 – 77 mm (1.81 x 2.2 x 2.68 – 3.03 in)
- Interchangeable lenses and industrial accessories
- Framerate 80Hz
- License-free analysis software and full SDK included
- Optional network connection via Gigabit Ethernet
- Optional industrial proccess interface (PIF)

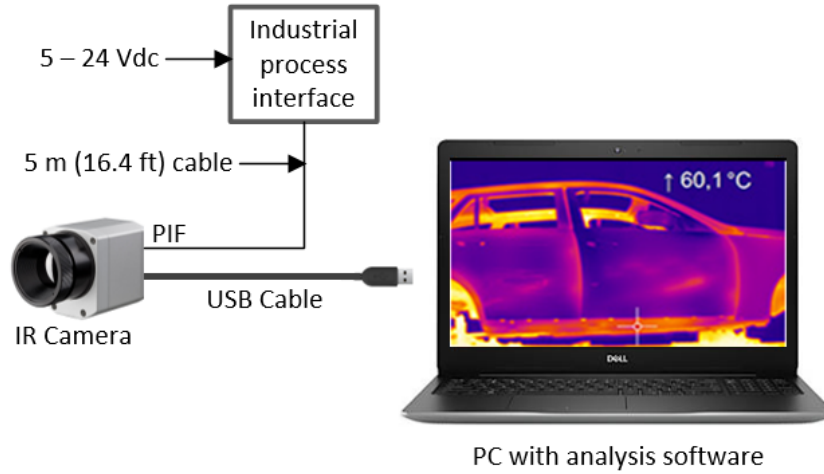This document is only intended to be a guideline and is not applicable to all situations. Information is subject to Fike's full disclaimer at http://www.fike.com/disclaimer.

Ordering

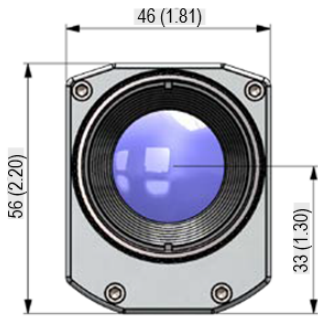| Part Number	Description
28-0025	PI 400i IR camera with 18° x 14° lens / F = 20 mm, -20°C to 900°C
28-0026	PI 400i IR camera with 29° x 22° lens / F = 12.7 mm, -20°C to 900°C
28-0027	PI 400i IR camera with 53° x 38° lens / F = 7.7 mm, -20°C to 900°C
28-0028	PI 400i IR camera with 80° x 54° lens / F = 5.7 mm, -20°C to 900°C
Accessories	
28-0040	4-pin USB cable, 1 m (3.3 ft), USB A connector
28-0041	4-pin USB cable, 3 m (9.9 ft), USB A connector
28-0042	4-pin USB cable, 5 m (16.4 ft), USB A connector
28-0043	4-pin USB cable, 5 m (16.4 ft), USB A connector, suitable for cable carriers and outdoor applications
28-0044	4-pin USB cable, 10 m (32.8 ft), USB A connector
28-0045	4-pin USB cable, 10 m (32.8 ft), USB A connector, suitable for cable carriers and outdoor applications
28-0046	4-pin USB cable, 20 m (65.6 ft), USB A connector
28-0047	4-pin USB cable, 20 m (65.6 ft), USB A connector, suitable for cable carriers and outdoor applications
28-0050	Protective housing, stainless steel, incl. mounting base
28-0051	Mounting base, stainless steel, adjustable in 2 axis
28-0052	Outdoor protective housing for PI camera (up to 90° FOV), for USB Server and for Industrial Process Interface with integrated heater, incl. protective window (Germanium) and air purge collar/24 VDC. Must also order 28-0054.
28-0053	Outdoor protective housing for PI camera (up to 90° FOV), for USB Server and for Industrial Process Interface with integrated heater, incl. protective window (plastic film/3 spare films) and air purge collar/24 VDC. Must also order 28-0054.
28-0054	Wall mount for outdoor protective housing
28-0057	Industrial Process Interface (PIF) for PI / Xi 400 cameras, with connection box, 500 VAC RMS isolation voltage between camera and process, 0/4-20 mA analog outputs, 5 m (16.4 ft) standard cable (85°C) for connection to PIF
28-0058	Industrial Process Interface (PIF) for PI / Xi 400 cameras, no connection box, 500 VAC RMS isolation voltage between camera and process, 0/4-20 mA analog outputs, 25 cm connection cable to PIF, for integration into outdoor protective housing
28-0059	USB-Server Gigabit: USB-Ethernet converter for camera, incl. 24 VDC power supply
28-0061	Indoor camera mount, wall-ceiling and T-bar clip mounting, 360° rotation, adjustable, tilt, tamper resistant

Network Connection via Gigabit Ethernet
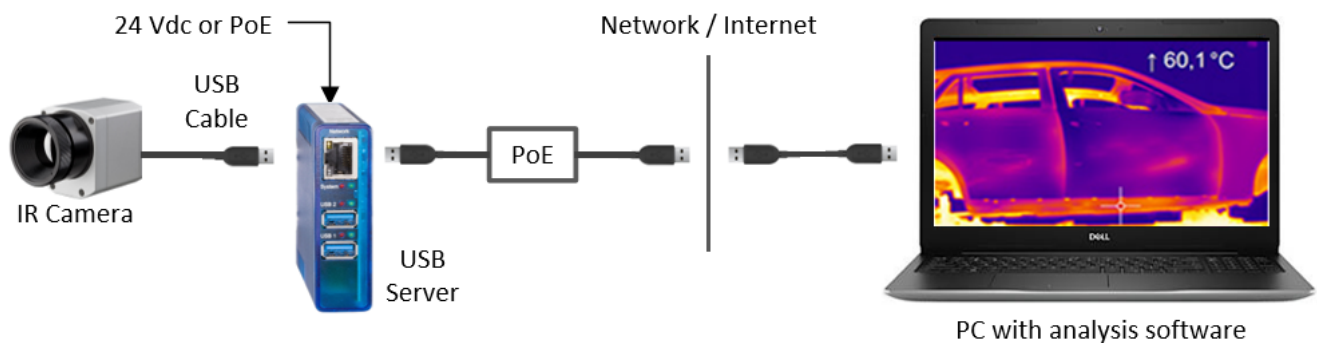
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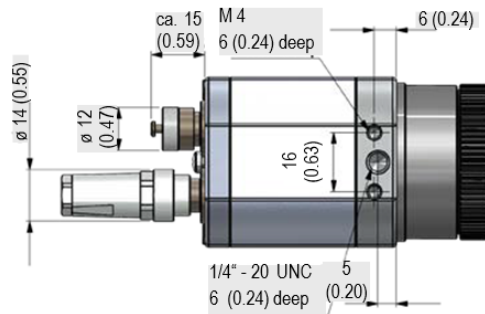Information is subject to Fike's full disclaimer at http://www.fike.com/disclaimer.

ISO 9001:2015 Certified

Industrial Process Interface

Industrial process interface

5 – 24 Vdc →

5 m (16.4 ft) cable →

PIF

IR Camera

USB Cable

PC with analysis software

↑ 60,1 °C

Dimensions

46 (1.81)

56 (2.20)

33 (1.30)

ca. 15 (0.59)

M 4 6 (0.24) deep

ø 14 (0.55)

ø 12 (0.47)

16 (0.63)

6 (0.24)

1/4" - 20 UNC 6 (0.24) deep

5 (0.20)

24-29 (0.94-1.14) depending on lens and focus position

39 (1.54)

ø 42 (1.65)

52 (2.05)

16.5 (0.65)

Dimensions in mm (in)

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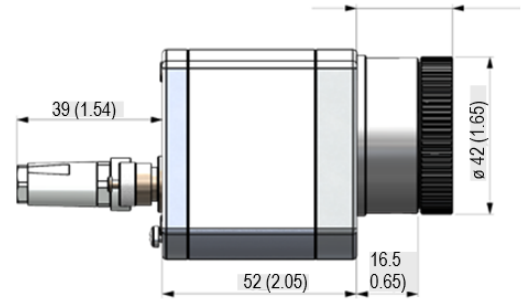Information is subject to Fike's full disclaimer at http://www.fike.com/disclaimer.