

FLUKE®

PTi120

Pocket Thermal Imager

Product Specifications

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General Specifications

Temperature	
Operating	-10 °C to 50 °C (14 °F to 122 °F)
Storage	-40 °C to 70 °C (-40 °F to 158 °F)
Relative humidity	95 % non-condensing
Altitude	
Operating	2000 m
Storage	12 000 m
Display	8.9 cm (3.5 in) touchscreen diagonal landscape color QVGA (320 x 240) LCD with backlight
Battery	Lithium-ion rechargeable battery
Battery life, as tested	≥2 hours continuous without WiFi (Actual life depends on settings and usage)
Charge time	≤1.5 hours
Charge temperature	0 °C to 40 °C (32 °F to 104 °F)
Charging mode	Micro USB cord from Product to PC, can charge while downloading images
Power save	User-selectable sleep and power off
Safety	IEC 61010-1: Pollution Degree 2
Wireless radio	
Frequency	2412 MHz to 2462 MHz
Output power	<100 mW
CMIIT	2019DJ4384
Electromagnetic Compatibility (EMC)	
International	EN61326-1, CISPR 11: Group 1, Class A <i>Group 1: Equipment has intentionally generated and/or uses conductively-coupled radio frequency energy that is necessary for the internal function of the equipment itself.</i> <i>Class A: Equipment is suitable for use in all establishments other than domestic and those directly connected to a low-voltage power supply network that supplies buildings used for domestic purposes. There may be potential difficulties in ensuring electromagnetic compatibility in other environments due to conducted and radiated disturbances.</i> <i>Caution: This equipment is not intended for use in residential environments and may not provide adequate protection to radio reception in such environments.</i>
Korea (KCC)	Class A Equipment (Industrial Broadcasting & Communication Equipment) <i>Class A: Equipment meets requirements for industrial electromagnetic wave equipment and the seller or user should take notice of it. This equipment is intended for use in business environments and not to be used in homes.</i>
USA (FCC)	47 CFR 15 Subpart C Sections 15.207, 15.209, 15.249
Vibration	10 Hz to 150 Hz, 0.15 mm, IEC 60068-2-6
Shock	30 g, 11 ms, IEC 60068-2-27
Drop	1 m
Size (H x W x L)	89 mm x 127 mm x 25 mm (3.5 in x 5.0 in x 1.0 in)
Weight	0.233 kg (0.51 lb)
Ingress protection	IEC 60529: IP54
Supported languages	Czech, Danish, Dutch, English, Finnish, French, German, Hungarian, Italian, Japanese, Korean, Norwegian, Polish, Portuguese, Russian, Simplified Chinese, Spanish, Swedish, Traditional Chinese, and Turkish

Detailed Specifications

Operating range	0.5 m to 1.2 m
Temperature range	-20 °C to 150 °C, Serial number: PTi120-xxxxxxx -20 °C to 400 °C, Serial number: PTi120H-xxxxxxx (not calibrated below -10 °C)
Accuracy	±2 °C or 2 % (whichever is greater)
Thermal image features	
Image capture frequency	9 Hz
Detector resolution	120 x 90
Total pixels	10 800
Thermal sensitivity (NETD)	≤0.06 °C at 30 °C target temperature (60 mK)
Spectral band	8.0 μm to 14 μm (long wave)
Pitch size	17 μm
Field of View (H x V)	50 ° x 38 °
Spatial resolution (IFOV)	7.6 mRad
F stop number	F1.13
Minimum focus distance	0.5 m
IR-Fusion technology	Adjustable Autoblend™ mode
Visual (visible light) features	
Operating range	0.5 m to 3.0 m
Resolution	320 x 240 output
Total pixels	307 200
Field of View (H X V)	68 ° x 52 °
Focus	Fixed lens
Illumination	Yes (On, Off, Illumination)
Palette	Grayscale, Ironbow, High Contrast, Amber, Hot Metal, Blue Red
Image capture and data storage	
Internal storage memory capacity	~500 images
File formats	Non-radiometric (.jpg) or Fully-radiometric (.is2). No analysis software is required for .jpg files. Fluke Connect™ desktop software is required for .is2 files.
Memory review	Thumbnail and full screen review
Text annotation	Yes (.is2 file format only, not .jpg file format)
Wireless connectivity	PC and WiFi to LAN (where available)