Flir C8™
Compact Thermal Camera

Key Features

- Superior thermal imaging quality with the 320 × 240 (76,800 pixels) true thermal imager for faster and more accurate analysis to find faults and anomalies
- Flir-patented MSX® enhancement, which embosses visible details onto thermal images for faster problem identification
- Isotherm instantly detects if temperature of equipment is exceeding a set threshold

Main Applications

- Electrical and mechanical maintenance
- HVAC, building diagnostics and restoration
- Electric vehicle inspections

Specifications

Imaging and optical data	
IR resolution	320 × 240 pixels
Thermal sensitivity/ NETD	<50 mK
Field of view (FOV)	35° × 27°
Minimum focus distance	0.4 m (1.3 ft)
Spatial resolution (IFOV)	2.0 mrad/pixel
F-number	1.4
Image frequency	9 Hz
Focus	Focus free
Digital zoom	Yes, zoom pinch, 1 to 4× continuous

Detector data	
Detector type	Focal plane array, uncooled microbolometer
Spectral range	7.5–13 μm
Detector pitch	12 μm

Image presentation	
Display resolution	640 × 480 pixels
Screen size	3.5 in
Aspect ratio	4:3
Auto orientation	Yes
Touch screen	Yes, capacitive
Display technology	IPS
Image adjustment	Automatic level and span / Manual level and span / 1-Touch level and span

Image modes	Infrared image / Visual image / MSX / Picture-in-picture (IR area on visual image)
Gallery	Yes, incl. thumbnails and custom folder structure

Measurement	
Object temperature range	-20°C to 450°C (-4°F to 842°F)
Accuracy at ambient temperature	• 0°C to 100°C (32°F to 212°F): ±2°C (±5.5°F) • 100°C to 450°C (212°F to 842°F): ±2%

Measurement analysis	
Measurement functions	Spot / Box with max. and min. / Isotherm
Measurements correction	Emissivity; matt/semi-matt/semi-glossy + custom value / Reflected apparent temperature / Atmospheric compensation
Color palettes	Iron, Rainbow, Rainbow High Contrast, White Hot, Black Hot, Arctic, Lava, Above Alarm, Below Alarm

Service functions	
Camera software update	Automatic over Wi-Fi / USB via computer

Storage of images	
Storage media	Built-in
Image storage capacity	>5000 sets of images
Image file format	Standard JPEG, 14-bit measurement data included

Specifications, cont.

Image annotations	
Text	Soft keyboard on touchscreen, auto-prompt for note when image is saved
Video streaming	
Non-radiometric video streaming	Yes; MSX, Thermal, Visual, Picture-in-Picture. USB video class colorized uncompressed with overlay 9 Hz.
Digital camera	
Resolution	5 MP
Focus	Fixed
Field of view	71.5 ° × 56° (84° diagonal)
Video lamp	Yes
Data communication interfaces	
Wi-Fi	802.11 a/b/g/n (2.4 and 5 GHz)
USB	USB 2.0, Type-C connector
Bluetooth	Yes
Power system	
Battery type	Rechargeable lithium ion battery (built-in)
Battery operating time	3 hours
Charging system	USB-C
Charging time	2 hours
Power management	Adjustable stand-by and automatic shut-down
Storage of images	
Storage media	Built-in
Image storage capacity	>5000 sets of images
Image file format	Standard JPEG, 14-bit measurement data included
Environmental data	
Operating temperature range	−10°C to 50°C (14°F to 122°F)
Storage temperature range	−40°C to 70°C (−40°F to 158°F)
Humidity (operating and storage)	IEC 60068-2-30/24 h 95% relative humidity 25°C to 40°C (77°F to 104°F) / 2 cycles
Relative humidity	95% relative humidity 25°C to 40°C (77°F to 104°F) non-condensing

Encapsulation	Camera housing and lens: IP54 (IEC 60529)
Vibration	2 g (IEC 60068-2-6)
Drop	Designed for 2 m (6.56 ft)
Environmental safety	• REACH Regulation EC 1907/2006 • RoHS2 Directive 2011/65/EC • WEEE Directive 2012/19/EC • Proposition 65
Physical data	
Weight (including battery)	0.2 kg (0.44 lb)
Size (L × W × H)	138 × 84 × 34 mm (5.4 × 3.3 × 1.3 in)
Tripod mounting	UNC ¼"-20
Housing material	PC and ABS, partially covered with TPE / Aluminum
Packaging, contents	Flir C8, documentation, Flir Thermal Studio Starter, wrist strap lanyard, USB cable, pouch

Ordering Information

Model	Description
18801-0101	Compact 320 × 240 Thermal Camera with MSX and Flir Ignite Enabled

Accessories

Model	Description
T911940ACC	USB 2.0 A to USB Type-C cable, 1.0 m
T199871	Traceable Calibration for C5
T300083	FLIR Thermal Studio Pro, Perpetual license
T300341	FLIR Thermal Studio Standard, 1 Year Subscription
T300258	FLIR Thermal Studio Standard, Perpetual license

Scan below to learn more about Flir C8