

FLIR T620 - FLIR T640

Technical specifications

Camera specific



	FLIR T620	FLIR T640
Imaging performance		
Thermal sensitivity (at 30 °C)	50 mK @ 30 °C	40 mK @ 30 °C
Digital zoom / Panning	Direct access, 1-4x continuous / Panning on freezed image	Direct access, 1-8x continuous / Panning on freezed image
Image presentation		
Viewfinder	N/A	800x480 pixels
Measurement		
Temperature range, standard	-40 °C to +150 °C 0 °C to +650 °C	-40 °C to +150 °C 0 °C to +2,000 °C
Temperature range, optional	up to +2,000 °C	
Measurement analysis		
Line profile function	N/A	Live profile, H/V-direction
Measurement presets	N/A	Add preset measurement set up by the press of one button

General

Imaging performance	
Resolution	640x480 pixels
Focal Plane array (FPA)	Uncooled microbolometer 640x480 pixels, latest generaton with 17 µm pitch
Spectral range	7.8 to 14 µm
Field of view / min focus distance	25° x 19° / 0.25 m
Spatial resolution (IFOV)	0.68 mrad
Image frequency	30 Hz
Focus	Manual / autofocus
Image presentation	
Display	4.3" superbright touchscreen LCD 800x480 pixels
Image modes	IR-image with selected color scale, Full color visual, Picture in Picture (Resizable and movable IR-area), Thermal Fusion (Threshold above, below and interval), thumbnail gallery
Manual image adjustments	Level/span/max/min
Automatic image adjustments, continuous or manual activation	Standard or based on histogram from image content
Automatic image adjustment with locked scale	Lock max, min or span



General

Measurement	
Accuracy	± 2 °C or ± 2% of reading
Measurement analysis	
Spotmeter	10
Area	5 Max/Min/Average value within box or circle
Automatic hot/cold detection	Max/Min temp. value and position shown within box, circle or on a line
Isotherm	Detect high/low temperature/interval
Difference temperature	Difference between any two measurement functions or any measurement function and a reference temperature
Reference temperature function	Manually set or captured from any measurement function
Emissivity correction	Variable from 0.01 to 1.0 or selected from materials list
Measurement corrections	Reflected temperature, optics transmission and atmospheric transmission
External windows correction	Automatic based on inputs of window temperature and transmission
Set-up	
Image controls	Palettes (Arctic, Gray, Iron, Lava, Rainbow and Rainbow HC), image adjustment (auto/manual)
Set-up controls	Local adaptation of units, language, date and time formats; automatic shutdown, display intensity
Configure information to be shown in image	✓
Programmable button	✓
Image storage	
Type	IR/visual images; simultaneous storage of visual and IR images
Format	Standard JPEG - including measurement data on SD memory card
Periodic image storage	Every 2 sec up to 24 hours
Digital camera	
Built-in digital camera	5 Mpixel incl. lamps
Laser LocatR	
Laser	Semiconductor AlGaInP diode laser, Class 2 - position is displayed on the IR image
Laser alignment	Laser position shown on IR-image
Image annotation	
Voice	60 seconds via Bluetooth®
Text	Text from predefined list or soft keyboard on touch screen
Sketch	A sketch drawn on touch screen is automatically saved with image
Meterlink	Wireless connection to: Extech Moisture meter MO297 or Extech clamp meter EX845
Report generation	
Instant Report in camera	Automatic generation of PDF report based on selected images direct in camera
Video streaming /recording	
Non radiometric IR-video streaming	MPEG 4 streaming to PC using USB
Video recording in camera	Non-radiometric IR video/visual video, MPEG4 to SD-card.
WiFi	Wireless streaming of non-radiometric IR-video, MPEG4
Update of camera	
Automatic update of camera to latest version	Automatic update of camera from PC running FLIR Tools
Data communication interfaces	
Interfaces	USB-mini, USB-A, Bluetooth®, WiFi, DVI video
Bluetooth®	Communication with smart phone, PC tablet, headset and external sensors
USB	USB-A: Connect external USB device - USB-mini-B: Data transfer to and from PC / Streaming MPEG 4
Power	
Battery type	Lithium-Ion (field replaceable)
Battery operating time	> 3 hours at 25°
Charging system	In camera, AC adaptor, 2-bay charger or 12 V from a vehicle
Power management	Automatic shutdown and sleep mode (user selectable)
AC operation	AC adaptor, 90-260 V AC, 50/60 Hz
Adaptor voltage	12 Volt VDC out
Environmental specifications	
Operating temperature range	-15 to +50°C
Storage temperature range	-40 °C to +70 °C
Humidity, operating and storage, non-condensing	IEC 60068-2-30 /24 h, 95% relative humidity +25 °C to +40 °C
Encapsulation	IP 54, IEC 60529
Bump, Operational	25G, IEC 60068-2-29
Vibration, Operational	2G, IEC 60068-2-6
EMC, emission	EN 61000-6-3
EMC, immunity	EN 61000-6-2
Physical characteristics	
Camera weight incl. battery	1.3 kg
Camera size (L x W x H)	143 x 195 x 95 mm
Tripod Mounting	1/4" - 20
Lenses optional	
Tele lens, 15°	15° x 11° / 0.9 m
Wide angle lens 45°	45° x 34° / 0.1 m
Standard package	
FLIR T620 / T640: Hard transport case, thermal imaging camera with lens, Battery (2), Battery charger, Large eyecap, Tripod adaptor, Neck strap, Lens cap, Bluetooth® headset, Calibration certificate, FLIR Tools™ PC software CD-ROM, Memory card with adaptor, Power supply incl. multiplugs, Printed Getting Started Guide, Printed Important Information Guide, USB cable, User documentation CD-ROM, HDMI cable (2), Warranty extension card or Registration card	