

Imaging Specifications

System Overview	T650sc	T630sc	T450sc	T430sc
Detector Type	Uncooled Microbolometer		Uncooled Microbolometer	
Spectral Range	7.5 – 13.0 μm		7.5 – 13.0 μm	
Resolution	640 x 480		320 x 240	
Detector Pitch 25 μm	17 μm		25 μm	
NETD	<20 mK	<40 mK	<30 mK	
Electronics / Imaging				
Time Constant	<8 ms		<12 ms	
Frame Rate	30 Hz		30 Hz	
Dynamic Range	14-bit		14-bit	
Digital Data Streaming	Real-time Radiometric = USB to PC Real-time Non-radiometric = MPEG via USB to PC		Real-time Radiometric = USB to PC Real-time Non-radiometric = MPEG via USB to PC	
On Camera Radiometric Recording	Real-time Temperature Calibrated Movie Recording at 30Hz to SD card	No	Real-time Temperature Calibrated Movie Recording at 30Hz to SD card	No
Analog Video	DVI over HDMI		Composite Video / RCA connector	
GSP	Location data stores with every image		USB, WiFi	
Command & Control	USB, WiFi			
Measurement				
Standard Temperature Range	-40°C to 2,000°C -40°F to 3632°F	-40°C to 650°C -40°F to 1202°F	-40°C to +1500°C -40°F to +2732°F	-20°C to +1500°C -4°F to +2732°F
Accuracy	+/- 1 °C +/- 1% (limited range)	+/- 2 °C +/- 2% (limited range)	+/- 1 °C +/- 1% (limited range)	+/- 2 °C +/- 2% (limited range)
Optics				
Camera f/#	f/1.0, Integrated Lens 18 mm (25°)		f/1.3 Integrated Lens 18 mm (25°)	
Available Lenses	88.9 mm (7°), 41.3 mm (15°), 24.6 mm (25°), 13.1 mm (45°), 6.5 mm (80°)		76 mm (6°), 30 mm (15°), 10 mm (45°), 4 mm (90°)	
Close-up Lenses / Microscopes	Close-up (25 μm), (50 μm), (100 μm)		Close-up (25 μm), (50 μm), (100 μm)	
Focus	Continuous Automatic or Manual (Motorized and tactile)		Automatic or Manual (Motorized)	
Image Presentation				
On-Camera Display	Touch Screen/4.3 in LCD Display (1024 x 600) LCD Viewfinder (800 x 600)		Touch Screen/3.5 in LCD Display (320 x 240)	
Auto-Orientation Keeps Onscreen Temperature Data	Keeps Onscreen Temperature Data Upright in Portrait or Landscape		Keeps Onscreen Temperature Data Upright in Portrait or Landscape	
Automatic Gain Control	Manual, Linear, Histogram, DDE		Manual, Linear, Histogram, DDE	
Image Analysis	Spot Meters, Areas, Auto Hot / Cold Detection, Difference Temp, Isotherms, Alarms	Spot Meters, Areas, Auto Hot / Cold Detection, Difference Temp, Isotherms, Alarms	Spot Meters, Areas, Auto Hot / Cold Detection, Difference Temp, Isotherms, Alarms	
Image Annotations	60 Sec Voice, Text, 4 x Markers, Sketch		60 Sec Voice, Text, 4 x Markers, Sketch	
Visible Image	5.0 Megapixel from Integrated Visible Camera		3.1 Megapixel from Integrated Visible Camera	
MSX ⁺ Enhancement/ Picture in Picture	Adds Visible Detail to Thermal/P-i-P Overlays Thermal on Visible Image		Adds Visible Detail to Thermal/P-i-P Overlays Thermal on Visible Image	
General				
Operating Temperature Range	-15°C to 50°C (5°F to 122°F)		-15°C to 50°C (5°F to 122°F)	
Storage Temperature Range	-40°C to 70°C (-40°F to 158°F)		-40°C to 70°C (-40°F to 158°F)	
Encapsulation	IP 54 (IEC 60529)		IP 54 (IEC 60529)	
Bump / Vibration	25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)		25 g (IEC 60068-2-29) / 2 g (IEC 60068-2-6)	
Power AC Adapter 90-260 VAC, 50/60 Hz	AC Adapter 90-260 VAC, 50/60 Hz or 12 V from a Vehicle		AC Adapter 90-260 VAC, 50/60 Hz or 12 V from a Vehicle	
Battery System	Li Ion, 4 Hours Operating Time		Li Ion, 4 Hours Operating Time	
Weight w/ Battery	1.3 kg (2.87 lb)		0.88 kg (1.94 lb)	
Size (L x W x H)	143 x 195 x 95 mm (4.2 x 7.9 x 4.9 in)		106 x 201 x 125 mm (4.2 x 7.9 x 4.9 in)	
Mounting	¼"-20		¼"-20	