



The World's Sixth Sense®



## FLIR T500 Series

Features, Benefits and Comparison vs  
FLIR T4XX Series

# FLIR T500 Series Features

- Ergonomic 180° Rotating Optical Block
- Dark Precision 2.0 GUI with:
  - Advanced folder structure
  - Quick access features with the swipe of a finger
- Laser assisted Focus and Distance Measurement
- 1-Touch Level and Span
- Geometric Area Calculation
- AutoCal™ Lens Design



# FLIR T500 Series Benefits

- **Rotating Optical Block:** Image at any angle for increased comfort and safety
- **Dark Precision 2.0:** Work faster and more efficiently with FLIR's state of the art GUI
- **Laser Focus:** Obtain a focused image every time with the assistance of the cameras laser function
- **Distance Measurement:** Ensure safe inspections by maintaining OSHA approved distances from energized objects



# FLIR T500 Series Benefits

- **1-Touch Level and Span:** Improve image quality with one touch on the vibrant LCD touchscreen
- **Geometric Area Calculation:** Conveniently have your FLIR camera calculate the area within a box
- **AutoCal™ Lens Design:** Share your FLIR lens with a variety of models in the FLIR Family (T500 and Exx-2017 Series)



# FLIR T500 vs T4XX Comparison Matrix



Product name	FLIR T420	FLIR T420bx	FLIR T440	FLIR T440bx	FLIR T460	FLIR T530 24°	FLIR T540 24°
Part No.	62103-1101	62103-1501	62103-1301	62103-1701	62104-2801	79302-0101	79302-0201
<b>Imaging and optical data</b>							
IR resolution	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	464 × 348 pixels
Thermal sensitivity/NETD	<40 mK @ +30°C (+86°F)	<30 mK @ +30°C (+86°F)	<40 mK @ +30°C (+86°F)	<30 mK @ +30°C (+86°F)	<30 mK @ +30°C (+86°F)	<30 mK, 42° @ +30°C (+86°F)	<30 mK, 42° @ +30°C (+86°F)
Field of view (standard lens)	25° × 19°	25° × 19°	25° × 19°	25° × 19°	25° × 19°	24° × 18°	24° × 18°
Minimum focus distance	0.4 m (1.31 ft.)	0.4 m (1.31 ft.)	0.4 m (1.31 ft.)	0.4 m (1.31 ft.)	0.4 m (1.31 ft.)	0.15 m (0.49 ft.), 42°	0.15 m (0.49 ft.), 42°
Spatial resolution (IFOV)	1.36 mrad	1.36 mrad	1.36 mrad	1.36 mrad	1.36 mrad	1.31 mrad/pixel, 24°	0.90 mrad/pixel, 24°
<b>Lens identification</b>						<b>AutoCal™</b>	<b>AutoCal™</b>
F-number	1.3	1.3	1.3	1.3	1.3	1.3, 24°	1.3, 24°
Image frequency	60 Hz	60 Hz	60 Hz	60 Hz	60 Hz	30 Hz	30 Hz
<b>Focus</b>	Automatic (one shot) or manual	Automatic (one shot) or manual	Automatic (one shot) or manual	Automatic (one shot) or manual	Automatic (one shot) or manual	<b>Continuous LDM, One-shot LDM and contrast, Manual</b>	<b>Continuous LDM, One-shot LDM and contrast, Manual</b>
Digital zoom	2x and 4x	2x and 4x	2x, 4x and 8x	2x, 4x and 8x	2x, 4x and 8x	1–4x continuous	1–6x continuous
<b>Detector data</b>							
Detector type	FPA, uncooled microbolometer	FPA, uncooled microbolometer	FPA, uncooled microbolometer	FPA, uncooled microbolometer	FPA, uncooled microbolometer	FPA, uncooled microbolometer	FPA, uncooled microbolometer
Spectral range	7.5–13 μm	7.5–13 μm	7.5–13 μm	7.5–13 μm	7.5–13 μm	7.5–13 μm	7.5–13 μm
<b>Detector pitch</b>	25 μm	25 μm	25 μm	25 μm	25 μm	<b>17 μm</b>	<b>17 μm</b>
<b>Image presentation</b>							
Resolution	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	320 × 240 pixels	<b>640 × 480 pixels (VGA)</b>	<b>640 × 480 pixels (VGA)</b>
Screen size	3.5 in.	3.5 in.	3.5 in.	3.5 in.	3.5 in.	<b>4 in.</b>	<b>4 in.</b>
Image adjustment	Auto or manual	Auto or manual	Auto or manual	Auto or manual	Auto or manual	<b>Auto, manual, 1-Touch</b>	<b>Auto, manual, 1-Touch</b>
<b>Image Presentation modes</b>	IR, Visual, MSX, Picture in Picture, Gallery	Yes	Yes	Yes	Yes	Yes	Yes
<b>Measurement analysis</b>							
Spotmeter	5	5	5	5	5	3 in live mode	3 in live mode
Emissivity correction	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Area	5 + 5 areas (boxes or circles)	5 + 5 areas (boxes or circles)	5 + 5 areas (boxes or circles)	5 + 5 areas (boxes or circles)	5 + 5 areas (boxes or circles)	3 in live mode	3 in live mode
<b>Geometric Area Calculation</b>						<b>Yes</b>	<b>Yes</b>
<b>Distance Measurement</b>						<b>Yes, with built in laser</b>	<b>Yes, with built in laser</b>
Profile	-	-	1 line profile with max/min temp.	1 line profile with max/min temp.	1 line profile with max/min temp.		
Measurement presets	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Difference temperature	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Reference temperature	Yes	Yes	Yes	Yes	Yes	Yes	Yes
User presets (in live images)	-	-	Yes	Yes	Yes	Yes	Yes
<b>Measurement</b>							
Object temperature range	-20 to +120°C (-4 to +248°F) 0 to +650°C (32 to 1202°F)	-20 to +120°C (-4 to +248°F) 0 to +350°C (+32 to +662°F)	-20 to +120°C (-4 to +248°F) 0 to +650°C (32 to 1202°F) 250 to 1200°C (482 to 2192°F)	-20 to +120°C (-4 to +248°F) 0 to +650°C (32 to 1202°F)	-20 to +120°C (-4 to +248°F) 0 to +650°C (+32 to +1202°F) 250 to 1200°C (482 to 2192°F)	-20 to +120°C (-4 to +248°F) 0–650°C (32–1202°F) Optional: 300–1200°C (572–2192°F)	-20 to +120°C (-4 to +248°F) 0–650°C (32–1202°F) 300–1500°C (572–2732°F)
Accuracy	±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.	±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.	±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.	±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.	±1°C (±1.8°F) or ±1% of reading for limited temperature range. ±2°C (±3.6°F) or 2%, whichever is greater, at 25°C (77°F) nominal.	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 15–35°C (59–95°F) and object temperature above 95°F and object temperature above 0°C (32°F)	±2°C (±3.6°F) or ±2% of reading, for ambient temperature 15–35°C (59–95°F) and object temperature above 95°F and object temperature above 0°C (32°F)

# FLIR T4XX Replacement List

T4XX Series		T500 Series Replacement	
<a href="#">62103-1102</a>	FLIR T420 (incl. Wi-Fi and 15° lens)	<a href="#">79304-0101</a>	FLIR T530 24° + 14°
<a href="#">62103-1103</a>	FLIR T420 (incl. Wi-Fi and 45° lens)	<a href="#">79305-0101</a>	FLIR T530 24° + 42°
<a href="#">62103-1105</a>	FLIR T420 (incl. Wi-Fi and Ext. cal.) (60 Hz)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1101</a>	FLIR T420 (incl. Wi-Fi)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1502</a>	FLIR T420bx (incl. Wi-Fi and Ext. cal.) (60 Hz)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1501</a>	FLIR T420bx (incl. Wi-Fi)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1503</a>	FLIR T420bx 25° and 15° w/case	<a href="#">79304-0101</a>	FLIR T530 24° + 14°
<a href="#">62103-1504</a>	FLIR T420bx 25° and 45° w/case	<a href="#">79305-0101</a>	FLIR T530 24° + 42°
<a href="#">62103-1304</a>	FLIR T440 (incl. Wi-Fi and Ext. cal.) (60 Hz)	** <a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1302</a>	FLIR T440 (incl. Wi-Fi and 15° lens)	** <a href="#">79304-0101</a>	FLIR T530 24° + 14°
<a href="#">62103-1303</a>	FLIR T440 (incl. Wi-Fi and 45° lens)	** <a href="#">79305-0101</a>	FLIR T530 24° + 42°
<a href="#">62103-1301</a>	FLIR T440 (incl. Wi-Fi)	** <a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1702</a>	FLIR T440bx (incl. Wi-Fi and Ext. cal.) (60 Hz)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1701</a>	FLIR T440bx (incl. Wi-Fi)	<a href="#">79302-0101</a>	FLIR T530 24°
<a href="#">62103-1703</a>	FLIR T440bx 25° and 15° w/case	<a href="#">79304-0101</a>	FLIR T530 24° + 14°
<a href="#">62103-1704</a>	FLIR T440bx 25° and 45° w/case	<a href="#">79305-0101</a>	FLIR T530 24° + 42°
<a href="#">62104-2802</a>	FLIR T460 (incl. Wi-Fi and Ext. cal.)	<a href="#">79302-0201</a>	FLIR T540 24°
<a href="#">62104-2801</a>	FLIR T460 (incl. Wi-Fi)	<a href="#">79302-0201</a>	FLIR T540 24°
<a href="#">62104-2803</a>	FLIR T460 25° and 15° w/case	<a href="#">79304-0201</a>	FLIR T540 24° + 14°
<a href="#">62104-2804</a>	FLIR T460 25° and 45° w/case	<a href="#">79305-0201</a>	FLIR T540 24° + 42°
		** Plus High temp option <a href="#">T199616</a>	High temperature option, +300 to +1200°C



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