

## Fluke Ti40FT and Ti45FT Infrared IR FlexCam Thermal Imager Cameras with IR-Fusion Technology

The Fluke Ti4x models feature everything needed for virtually every *thermography* task. With a 160 x 120 detector and a temperature sensitivity down to 0.08°C (80mK) (NETD) they deliver *high resolution images* where even the smallest temperature differences can be seen. The units are extremely easy to use through the Windows CE menu structure and offer an extended troubleshooting feature set to allow on the spot analysis in the field.

The FT models feature the innovative IR-Fusion technology. IR-Fusion captures a visible light image in addition to the infrared image and takes the mystery out of IR image analysis. It helps to better identify and report suspect components and enable the repair to be done right the first time. To find out more select IR-Fusion on the side navigation of this page.

7.5 Hz models are available in some geographies. Check with your Fluke sales representative for additional information.

Typical applications:

- Predictive maintenance – Identify electrical and mechanical problems before they cause failure
- Industrial maintenance – Check whether repairs have been performed successfully
- Quality control – Examine prototypes and refine thermal management designs
- Process monitoring – Real-time observation to ensure efficient and safe operation

Model Name	Description
<p><b>Fluke Ti40FT-20</b></p>	<p><b>IR Infrared FlexCam Thermal Imager with IR-Fusion &amp; 20 mm Germanium lens</b></p> <p>All models include:</p> <ul style="list-style-type: none"> <li>• 20 mm Germanium lens</li> <li>• Heavy duty carrying case</li> <li>• 2 rechargeable battery packs</li> <li>• Battery charger</li> <li>• AC adapter (for Ti45 model only)</li> <li>• Video cable</li> <li>• 512 MB compact flash card</li> <li>• Compact flash card reader and USB cable</li> <li>• Neck strap</li> <li>• SmartView reporting and analysis software on CD</li> <li>• User manual on CD</li> <li>• Calibration certificate</li> </ul>
<p><b>Fluke Ti45FT-20</b></p>	<p><b>IR Infrared FlexCam Thermal Imager with IR-Fusion &amp; 20 mm Germanium lens</b></p>
<p>Available Options</p>	

Use the <a href="#">Product Selector Tool</a> button from Fluke to view the entire range of possibilities.	
<b>Lens</b>	<i>10.5mm, 20mm, and 54mm lenses are available within the Ti4X series.</i> Use the Configurator to view the possible combinations.
<b>High temperature</b>	Some models in the Ti4X series can include the high temperature option allowing <b>readings up to 1200 °C (2192 °F)</b> .

<b>Ti40FT and Ti45FT Specifications</b>		
<b>Imaging performance</b>	<b>Thermal</b> <b>Field of view (FOV)</b> <b>Spatial resolution (IFOV)</b> <b>Min focus distance</b> <b>Thermal sensitivity (NETD)</b> <b>Detector data acquisition / Image frequency</b> <b>Focus</b> <b>IR digital zoom</b> <b>Detector type</b> <b>Spectral band</b> <b>Digital image enhancement</b>	20 mm lens 23 ° x 17 ° FOV 10.5 mm lens 42 ° x 32 ° 54 mm lens 9° x 6° 2.60 mrad 0.15 m Ti45: ≤0.08 °C(80 mK) at 30 °C Ti40: ≤0.09 °C (90 mK) at 30 °C 30 Hz/60 Hz SmartFocus; one finger continuous focus Ti40: 1x - Ti45: 2x 160 x 120 Focal Plane Array, Vanadium Oxide (VOx) Uncooled Microbolometer 8 μm to 14 μm Automatic full-time enhanced
	<b>On-camera operating modes</b>	Ti40: Full thermal or full visual light. Merge thermal-visual images in SmartView software. Picture-in-Picture Ti45: Full thermal, full visual light or merged thermal-visual images. Picture-in-Picture

	<p><b>Visible light camera</b>      1280 x 1024 pixels, full color</p> <p><b>Visible light digital zoom</b>      Ti40: 1x - Ti45: 2x</p>
<p><b>Temperature measurement</b></p>	<p><b>Calibrated temperature range</b>      Ti40: -20 °C to 350 °C (-4 to 662 °F) in 2 ranges Ti45: -20 °C to 600 °C (-4 to 1112 °F) in 3 ranges</p> <p>Range 1      Ti40: -20 °C to 100 °C (-4 to 212 °F) Ti45: -20 °C to 100 °C (-4 to 212 °F)</p> <p>Range 2      Ti40: -20 °C to 350 °C (-4 to 662 °F) Ti45: -20 °C to 350 °C (-4 to 662 °F)</p> <p>Range 3      Ti40: - Ti45: 250 °C to 600 °C (482 to 1112 °F)</p> <p><b>Optional - High temperature</b>      Ti40: - Ti45: Up to 1200 °C (2192 °F)</p> <p>Range 4      Ti40: - Ti45: 500 °C to 1200 °C (932 to 2192 °F)</p> <p><b>Accuracy</b>      ±2°C or 2 % (whichever is greater)</p> <p>Ti40: Centerpoint, center box (area min/max, average)</p> <p><b>Measurement modes</b>      Ti45: Centerpoint, center box (area min/max, average), moveable spots/boxes, user defined field/text annotations, isotherms, automatic hot and cold point detection, visible color alarm above and below</p> <p><b>Emissivity correction</b>      0.1 to 1.0 (0.01 increments)</p>
<p><b>Image presentation</b></p>	<p><b>Digital display</b>      5" large high-resolution digital display</p> <p><b>LCD backlight</b>      Sunlight readable color LCD</p> <p><b>Video output</b>      RS170 EIA/NTSC or CCIR/PAL composite video</p>

	<p><b>Palettes</b>      Grayscale, grayscale inverted, blue red, high contrast, hot metal, ironbow, amber, amber inverted</p>																
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	<p style="text-align: right;">replaceable</p> <p>Battery operating time      3 hours continuous operation (2 hours with IR-Fusion engaged)</p> <p>Battery charging              2 bay intelligent charger powered via AC outlet</p> <p>AC operation                    AC adapter 110/220 VAC, 50/60 Hz (Ti45 only)</p> <p>Power saving                    Automatic shutdown and sleep modes (user specified)</p>
<p><b>Environmental and mechanical design</b></p>	<p><b>Operating temperature</b>    <b>-10 °C to +50 °C (14 °F to 122 °F)</b></p> <p><b>Storage temperature</b>       <b>-40 °C to +70 °C (-40 °F to 158 °F)</b></p> <p>Relative humidity              Operating and storage 10% to 95%, non-condensing</p> <p>Water and dust resistant      IP54</p> <p>Weight (including batteries)    1.95 kg (4.3 lbs)</p> <p>Camera size (HxWxD)          162 x 262 x 101 mm (6.5" x 10.5" x 4.0")</p>