

# UTi260B Professional Thermal Imager

## Operating Guide

Prepared by: Muhammad Sami Shahid



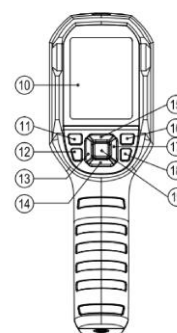
**Before first use: insert the microSD card, power on for warm-up, and keep the unit stationary for accurate readings.**

### Essential cautions

<b>Warm up imager for 20 minutes</b> after long idle time or when moving between environments.	<b>Do not measure while charging</b> as internal heating can affect temperature readings.
<b>Use the correct emissivity</b> for the surface you are measuring.	<b>Remove/insert SD card when off</b> - also avoid doing this during saving or viewing.

### Buttons Description with Numbers on Figure

Button	Main use
<b>Power (11 on Fig.)</b>	Press and hold 3 s to turn on/off
<b>Back Trigger (Red Trigger)</b>	Pull/release to capture an image
<b>SET (19 on Fig.)</b>	Open menus, confirm selections, save adjustments
<b>Back and Replay (18 on Fig.)</b>	Return, exit, or manual calibration from main screen and Open gallery / review stored images
<b>Arrow keys (13,14,15,16 on Fig.)</b>	Move through menus and move point/ROI markers
<b>Flashlight (12 on Fig.)</b>	Press and hold 3 s to turn LED on/off



### How to operate

<p><b>1) Power on / off</b></p> <ul style="list-style-type: none"> <li>• Hold Power for 3 seconds.</li> <li>• For best accuracy after long idle time, let the camera stabilize for 20 minutes.</li> <li>• Shutdown takes about 5-6 seconds; avoid rapid cycling.</li> </ul> <p><b>2) Capture and review</b></p> <ul style="list-style-type: none"> <li>• Pull and release the trigger to capture.</li> <li>• Manual save: choose Save or Discard with Left/Right, then confirm.</li> <li>• Auto save: the image stores automatically.</li> </ul> <p><b>3) View images</b></p> <ul style="list-style-type: none"> <li>• Press Replay to open the gallery.</li> <li>• Use arrow keys to choose an image.</li> <li>• SET opens full screen; SET again shows delete/info options.</li> </ul>	<p><b>4) Measurement modes</b></p> <ul style="list-style-type: none"> <li>• SET &gt; Image Mode: Thermal, Digital, Fusion, or PIP.</li> <li>• In Fusion, adjust blending ratio with Left/Right after escaping Menu: 0%, 25%, 50%, 75%, 100%.</li> <li>• Alignment Distance can be set to match target (0.25-4.00m) → SET &gt; Settings &gt; Measurements &gt; Distance</li> </ul> <p><b>5) Key measurement tools</b></p> <ul style="list-style-type: none"> <li>• SET &gt; Measurement: Center Spot, Hi/Lo Spot, or ROI.</li> <li>• SET &gt; Point Temperature: add points and move them with arrow keys.</li> <li>• SET &gt; Measurements: adjust Emissivity, Ambient Temperature, and Distance.</li> </ul> <p><b>6) Storage and USB</b></p> <ul style="list-style-type: none"> <li>• Images are saved to the microSD card only.</li> <li>• SET &gt; Settings &gt; System Settings &gt; Format SD Card to clear the card.</li> <li>• USB Disk = browse/analyze on PC; USB Camera = live projection.</li> </ul>
--	---

### Important settings

Menu path	What it changes
Language	Chinese or English
Date / Time	Camera clock and file timestamps
Temp Unit	Celsius or Fahrenheit
HI/LO Alert	High / low alarm limits and alert on/off
Display Brightness	Low, Medium, or High
Auto Power Off	5, 10, 30 minutes, or Off
Auto Save	Save captures automatically or manually
Factory Reset	Restore original settings

### Emissivity quick reference

Higher emissivity surfaces are generally easier to measure accurately. The values below are common starting points from the manual:

Material	Emissivity
Wood	0.85
Brick	0.93
Stainless steel	0.14
Copper plate	0.06
Water	0.96
Human skin	0.98
Aluminum plate	0.09
Rubber	0.95

Care points: keep the lens clean, do not use alcohol or solvents, do not use the camera in flammable/ explosive/ wet/ corrosive areas, and avoid repeated SD card insertion/removal.

Problem	Try this
Image not saving	Check that the microSD card is inserted and use manual or auto save correctly.
Reading looks unstable	Warm up 20 minutes, avoid measuring during charging, and check emissivity.
PC live view not working	Set USB Mode to USB Camera and close the PC software before unplugging.
Card errors	Use System Settings > Format SD Card, and do not remove the card during save/format/view.

Figure 1. Powering on the UTi260B thermal imager. Hold the Power button for 3 seconds and allow the device to stabilize before measurements.

Figure 2. Inspection of electrical equipment using thermal imaging to identify abnormal heating and potential faults.

Figure 3. Thermal inspection of a building surface to identify HVAC performance. (Fig.3 Shows the Temperature of HVAC at SBASSE LUMS!)



Figure 4. Thermal image showing temperature distribution across the human hand.

Figure 5. Thermal Inspection showing surface temperature of a laptop under maximum stress test inside an air conditioned room.

Figure 6. Thermal image showing temperatures outside SBASSE building on a hot day in summers.

