

# TECHNICAL DATA SHEET



Rel. EN 2-00 - 21/01/22

## THT80

POCKET IR CAMERA  
120X90PXL WITH  
TOUCH-SCREEN



**120x90**  
PIXEL



**TEMPERATURE  
RANGE**  
-20°\550°



**FUSION  
PiP**



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#### 1. IMAGING PERFORMANCE

##### THERMAL

|                          |                          |
|--------------------------|--------------------------|
| Detector type            | UFPA                     |
| Spectral range           | 8 $\pm$ 14 $\mu$ m       |
| Resolution / Pxl size    | 120 x 90pxl / 17 $\mu$ m |
| Thermal sensitivity/NETD | <0.05°C @ 30°C / 50mK    |
| Field of View (FOV)      | 50° x 37°                |
| Focal lens / F-number    | 2.3mm / 1.13             |
| Minimum focal distance   | 0.5m                     |
| IFOV (@1m)               | 7.3mrad                  |
| Focusing                 | Automatic                |
| Image frequency          | 50Hz                     |
| Color palettes           | 8 Standard + 4 Isotherms |

##### VISIBLE

|                   |                |
|-------------------|----------------|
| Integrated camera | 2Mpxl, FOV 59° |
|-------------------|----------------|

#### 2. IMAGING/IR VIDEO DISPLAY

|                 |  |
|-----------------|--|
| Display type    | 3.5" TFT color, capacitive touch-screen, high brightness |
| Image mode      | IR, Visible, Fusion PiP, Auto Fusion                     |
| IR Video        | Recording and saving MP4 format                          |
| Electronic zoom | x1 $\div$ x32 in continuous way                          |

#### 3. TEMPERATURE MEASUREMENT

| RANGE                  | RESOLUTION | ACCURACY (*)                              |
|------------------------|------------|---|
| -20°C $\div$ 550.0°C   | 0.1°C      | $\pm$ 2%rdg or $\pm$ 2°C (higher value)   |
| -4.0°F $\div$ 1022.0°F | 0.1°F      | $\pm$ 2%rdg or $\pm$ 3.6°F (higher value) |

(\*) Ambient temperature: 10°C  $\div$  35°C, Object temperature: >0°C

#### 4. TEMPERATURE MEASUREMENT SCREENING MODE

| RANGE                 | RESOLUTION | ACCURACY    |
|-----------------------|------------|-------------|
| 32.0°C $\div$ 42.0°C  | 0.1°C      | $\pm$ 0.5°C |
| 89.6°F $\div$ 107.6°F | 0.1°F      | $\pm$ 0.9°F |

#### 5. GENERAL SPECIFICATIONS

|                          |   |
|--------------------------|---|
| Measurement cursors      | 4 (1 fixed central + 3 freely positionable on image)  |
| Measurement modes        | Automatic / Manual / Histogram  |
| Emissivity correction    | 0.01 $\div$ 1.00 + internal table with common materials   |
| Measurement functions    | Automatic correction based on distance, relative humidity, ambient temperature, reflexed temperature, offset    |
| Advanced analysis        | Spots (max3), Lines (max 2), Areas (max 3), "Hot/Cold" points, Face mode temperature detection (max 10 persons) |
| Alarm on temperature     | Associated to measurements spots  |
| Operating temperature    | -15°C $\div$ 50°C   |
| Operating humidity       | 10%RH $\div$ 90%RH  |
| Storage temperature      | -40°C $\div$ 70°C   |
| Storage humidity         | 10%RH $\div$ 90%RH  |
| Encapsulation            | IP54 according with IEC529  |
| Shock                    | 25G, according with IEC60068-2-29   |
| Vibrations / Drop test   | 2G, according with IEC60068-2-6 / 2m  |
| Dimensions (L x W x H)   | 133 x 87 x 24mm   |
| Weight(battery included) | 200g  |



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### 6. IMAGE STORAGE AND EXTERNAL INTERFACE

|                    |  |
|--------------------|--|
| Memory             | Internal memory (3.4GB) + Micro SD card 16GB (max 32GB)        |
| File format        | JPEG standard (snapshots), HIR (radiometric)                   |
| Memory size        | 1000 pics/45min video (internal memory), >6000 pics (micro SD) |
| Textual annotation | With internal virtual keyboard                                 |
| PC interface       | USB-C (download IR images/videos to PC)                        |
| WiFi connection    | For connection to mobile devices through HTProCamera APP       |

### 7. POWER SUPPLY

|                 |  |
|-----------------|--|
| Battery type    | Rechargeable Li-ION, 3,7V 1500mAh                  |
| Charging system | In camera  |
| Battery life    | Approx. 4 hours (stand-by and WiFi off)            |
| External power  | External adapter 100/240VAC (50/60Hz)/5VDC, 2400mA |

This instrument complies with European Directive EMC 2014/35/EU and at requirements of European Directives 2011/65/EU (RoHS) and 2012/19/EU (WEEE)

