

TECHNICAL
DATA
SHEET



Rel. EN 2-00 - 09/06/22

THT400

PROFESSIONAL IR
CAMERA 640x480pxl
WITH TOUCH-SCREEN

640x480
PIXEL



TEMPERATURE
RANGE
-20°\550°



FUSION
PiP

THT400 is the new professional thermal imaging camera equipped with a high resolution 640 x 480pxl IR sensor which makes it suitable for use in electrical, mechanical, plumbing, ventilation and refrigeration systems.



THT400

Rel. EN 2-00 - 09/06/22

PROFESSIONAL IR CAMERA
640x480pxl WITH TOUCH-SCREEN

Page 2 of 3



TECHNICAL DATA SHEET

1. IMAGING PERFORMANCE

THERMAL

| | |
|--------------------------|--------------------------|
| Detector type | UFPA |
| Spectral range | 8 ±14µm |
| Resolution / Pxl size | 640 x 480pxl / 17µm |
| Thermal sensitivity/NETD | <0.05°C @ 30°C / 50mK |
| Field of View (FOV) | 31.9° x 25.7° |
| Focal lens / F-number | 13.5mm / 1.0 |
| Minimum focal distance | 0.5m |
| I FOV | 1.26mrad |
| Focusing | Automatic |
| Image frequency | 25Hz |
| Color palettes | 8 Standard + 4 Isotherms |

VISIBLE

| | |
|-------------------|----------------|
| Integrated camera | 2Mpxl, FOV 65° |
|-------------------|----------------|

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 ÷ x32 in continuous way |

3. TEMPERATURE MEASUREMENT

| RANGE | RESOLUTION | ACCURACY (*) |
|-------------------|------------|---------------------------------|
| -20°C ÷ 550.0°C | 0.1°C | ±2%rdg or ±2°C (higher value) |
| -4.0°F ÷ 1022.0°F | 0.1°F | ±2%rdg or ±3.6°F (higher value) |

(*) Ambient temperature: 10°C ÷ 35°C, Object temperature: >0°C

4. TEMPERATURE MEASUREMENT SCREENING MODE

| RANGE | RESOLUTION | ACCURACY |
|------------------|------------|----------|
| 32.0°C ÷ 42.0°C | 0.1°C | ±0.5°C |
| 89.6°F ÷ 107.6°F | 0.1°F | ±0.9°F |



THT400

Rel. EN 2-00 - 09/06/22

PROFESSIONAL IR CAMERA
640x480pxl WITH TOUCH-SCREEN

Page 3 of 3

TECHNICAL DATA SHEET



5. GENERAL SPECIFICATIONS

| | |
|--------------------------|---|
| Measurement cursors | 4 (1 fixed central + 3 freely positionable on image) |
| Measurement modes | Automatic / Manual / Histogram |
| Emissivity correction | 0.01 ÷ 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 |
| Temp. Compensation | only Screening mode |
| Operating temperature | -15°C ÷ 50°C |
| Operating humidity | 10%RH ÷ 90%RH |
| Storage temperature | -40°C ÷ 70°C |
| Storage humidity | 10%RH ÷ 90%RH |
| Encapsulation | IP54 according with IEC529 |
| Shock | 25G, according with IEC60068-2-29 |
| Vibrations | 2G, according with IEC60068-2-6 |
| Drop test | 2m |
| Dimensions (L x W x H) | 240 x 100 x 110mm |
| Weight(battery included) | 480g |

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 2600mAh |
| 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)

