

TECHNICAL
DATA
SHEET



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

THT500

PROFESSIONAL IR CAMERA
160X120PXL WITH
TOUCH-SCREEN

160x120
PIXEL



TEMPERATURE
RANGE
-20°\650°



FUSION
PiP



THT500

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1. IMAGING PERFORMANCE

THERMAL

Detector type	UFPA
Spectral range	8 ÷ 14µm
Resolution / Pxl size	160 x 120 pxl / 17µm
Thermal sensitivity/NETD	<0.05°C @ 30°C / 50mK
Field of View (FOV)	17.3° x 13°
Focal lens / F-number	9mm / 1.0
Minimum focal distance	0.5m
IFOV (@1m)	1.89mrad
Focusing	Manual on lens
Image frequency	50Hz
Color palettes	8 Standard + 4 Isotherms

VISIBLE

Integrated camera	5Mpxl, FOV 59°
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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
Video output	HDMI
Electronic zoom	x1 ÷ x32 in continuous way

3. TEMPERATURE MEASUREMENT

RANGE	RESOLUTION	ACCURACY (*)
-20°C ÷ 650.0°C	0.1°C	±2%rdg or ±2°C (higher value)
-4.0°F ÷ 1202.0°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

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5. GENERAL SPECIFICATIONS

Measurement cursors	4 (1 fixed central + 3 freely positionable on image)
Laser pointer	Class 2 according with IEC 60825-1
Built-in illuminator	White light LED
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)
Distance measurement	range: 0.05m ÷ 30m, accuracy: ±1.5mm, laser pointer
Alarm on temperature	Associated to measurements spots
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 / Drop test	2G, according with IEC60068-2-6 / 2m
Dimensions (L x W x H)	272 x 101 x 148mm
Weight(battery included)	850g

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)
Voice annotation	60 s/image
Textual annotation	With internal virtual keyboard
PC interface	microUSB/USB 2.0 (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 5200mAh
Charging system	In camera or in base charger
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)