FOTRIC TF3 Datasheet

■ Specifications

Basic parameters	
Infrared Resolution	240*320
Detector Type	Uncooled Infrared Focal Plane Detector
Thermal Sensitivity (NETD)	<30mK@30°C
Pixel Pitch	12μm
Spectral Response Range	8~14μm
Image Frame Rate	30Hz
Field of View (FOV)	38°*50°
Spatial Resolution (IFOV)	2.76mrad
Minimum Imaging Distance	0.3m
Focal length	4mm
Focusing Method	Focus-free
Optional Lens	Refer to "Lens Parameters"
Measurement and analysis	
Temperature Measurement Range	-20~450°C
Temperature Span	-20~120°C,0~450°C
Temperature Measurement Accuracy	±2°C or 2%, whichever is greater (environmental temperature 15~35°C, target temperature >0°C, calibration at 1 meter)
Temperature Measurement Spot	Center point
Temperature Measurement Box	Center frame
Global Temperature Correction	Supports correction of temperature measurement parameters including emissivity and target distance
Analysis software	AnalyzIR professional thermal imaging analysis software
Image display	
Display screen	3.2" IPS LCD Display, 640×480 Resolution
Image mode	Thermal Image, Blend (T-DEF®),PIP, Digital Camera.
Blend Mode(T-DEF®)	Adjustable infrared image transparency from 0% to 100% in blend mode.
Picture-in-Picture	Overlay thermal image on visible light image
Palette	Supports 4 standard color palettes: Rain, Iron, Grey, Rainbow
Span Mode	Supports automatic adjustment of temperature span Supports manual adjustment of temperature span (minimum 2°C)
Color Alarm	Supports color alarm for temperatures above the threshold
Image overlay information	Displays center temperature, maximum temperature, minimum temperature, center-frame maximum and minimum temperatures, measurement parameters, as well as date and time information
High/Low Temperature Tracking	Automatically tracks the highest and lowest temperature points within a marked measurement area
Normalized Histogram Color Distribution(T-TWB®)	Optimize display of images with large dynamic range to show more details
Imaging function	
Digital camera	2MP, Industrial digital camera

Storage card	TF card, supports hot-swapping, maximum support of 32GB.
Single-frame capture	In Thermal Image, Blend (T-DEF®), and Picture-in-Picture modes, a radiometric thermal image is saved for analysis. In Digital Image mode, a visible-light image is saved. Thermal images captured in blend (T-DEF®) and Picture-in-Picture modes include the distance-aligned visible-light image.
Image format	jpg (thermal image), jpg (visible light image)
On-device gallery	Supports viewing images in the gallery by icon. Supports image preview in the gallery.
Auxiliary functions	
Software and firmware upgrades	Support local upgrade via TF card
LED illumination lamp	Support flashlight illumination and flash mode
Power system	
Battery type	3.6V, 4800mAh rechargeable lithium battery
Battery operating time	Continuous operation time ≥6.5h (Actual operation time depends on the environment and operation condition)
Charging method	Supports direct charging via USB Type-C interface
Charging time	Charge up to 90% in 2.5 hours
Energy management	Automatic shutdown, Automatic sleep
External power supply	Supports power supply to the device via USB Type-C interface
Reliability and certification	
Safety standards	GB 4793.1/EN 61010-1
Electromagnetic compatibility	GB/T 18268.1/EN IEC 61326-1
Protection rating	IP54(GB/T 4208/IEC 60529)
Drop resistance	Designed for 2-meter drop resistance
Shock resistance	25g(GB/T 2423.5/IEC 60068-2-27)
Vibration resistance	2g(GB/T 2423.10/IEC 60068-2-6)
RoHS Directive	Compliant
Physical parameters	
Operating temperature	-20~50°C
Storage temperature	-40–70°C, without battery
Relative humidity	<95%RH
Dimensions	222mm*74mm*77mm
Weight	430g
Housing material	Hard Rubber□PC+ABS□Soft Rubber□TPE
Mounting Method	Support tripod connection with UNC 1/4-20 interface
Warranty and maintenance	
Warranty period	1-year warranty for the whole unit
Recommended calibration interval	2 Years
Supported languages	
Supported languages	English, German, French, Spanish, Portuguese, Italian, Polish, Japanese, Korean, Traditional Chinese, Thai

Standard product configuration	
Standard configuration	Main unit ×1□USB Type-C to USB cable ×1□32GB TF card□Quick start guide□Color box□Portable Soft Bag

■ Lens

Lens	Lens Parameters	
	Spatial Resolution (IFOV)	Temperature Span
L50	2.76mrad	-20~120°C□0~450°C □calibrated at 1-meter distance□

■ Available Models

A262345-B002 FOTRIC TF3-L50

* For additional configurations, please contact us directly.

■ Accessories