

Fotric TK5 Datasheet

■ Specifications

Basic parameters	
Infrared Resolution	320*240
Detector Type	Uncooled Infrared Focal Plane Detector
Thermal Sensitivity (NETD)	<40mK@30°C
Pixel Pitch	12μm
Spectral Response Range	8~14μm
Image Frame Rate	30Hz
Field of View (FOV)	49°*37°
Spatial Resolution (IFOV)	2.67mrad
Minimum Imaging Distance	0.4m
Focal length	3mm
Focusing Method	Focus-free
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	20
Temperature Measurement Line	10
Temperature Measurement Box	10
Global Temperature Correction	Support temperature measurement parameter correction: emissivity, ambient temperature, reflected temperature, relative humidity, target distance, infrared window parameters(temperature and transmittance) .
Analysis software	AnalyzIR professional thermal imaging analysis software
Image display	
Display screen	3.5-inch, 640*480 pixels, IPS LCD touchscreen with Gorilla explosion-proof cover glass
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 6 general color palettes: Rain, Iron, Grey, Rainbow, GreyRed, GlowBow
Span Mode	Supports automatic adjustment of temperature span Supports manual adjustment of temperature span (minimum 2°C)
Color Alarm	Supports color alarms for above, below, and between temperatures
Image overlay information	Display global maximum and minimum temperatures, maximum, minimum, and average temperatures within the measurement area, emissivity, measurement parameters, lens information, and 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	5MP industrial-grade digital camera
Storage card	TF card (FAT32 file system), hot-swappable, supports up to 32GB
Single-frame capture	In thermal, blend (T-DEF®), and picture-in-picture modes: saves an analyzable thermal image In visible light mode: saves a visible light image Thermal images in thermal, blend (T-DEF®), and picture-in-picture modes include a visible image aligned at a specified distance
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
Laser	Laser pointer: Class: Class 2, Wavelength: 650nm, Power: <1mW
LED illumination lamp	Support flashlight illumination and flash mode
Power system	
Battery type	3.6V, 5000mAh Rechargeable Lithium Battery, Field-Replaceable
Battery operating time	Continuous Operating Time ≥ 5 Hours (Actual runtime depends on environment and usage conditions)
Charging method	Supports charging via dock charger and direct charging via USB Type-C interface
Charging time	Charge up to 90% in 2.5 hours
Energy management	Auto shutdown, auto screen off, manual screen off
External power supply	Supports power supply to the device via USB Type-C interface
Reliability and certification	
Safety standards	GB/T 7247.1/IEC 60825-1
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	243mm*95mm*142mm
Weight	720g
Battery weight	150g
Housing material	Hard plastic: PC+ABS, soft plastic: TPE, magnesium alloy.
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 □ Rechargeable Lithium Battery □ Charging Dock □ Power Adapter □ USB Type-C to USB cable ×1 □ 32GB TF card □ Calibration certificate □ Quick start guide □ Packing list

■ Lens

Lens	Lens Parameters					
	Field of View (FOV)	Spatial Resolution (IFOV)	Minimum Imaging Distance	Minimum Registration Distance	Focal length	Temperature Span
L49	49°*37°	2.67mrad	0.4m	0.7m	4mm	-20~120°C □ 0~450°C □ calibrated at 1-meter distance □

■ Available Models

A252068-B001 Fotric TK5-L49

* For additional configurations, please contact us directly.

■ Accessories

● Optional

C251242 Rechargeable Lithium Battery

C251245 Charging Dock

C251237 Power Adapter

C251333 Portable Soft Bag

C251338 Hard Carrying Case

C251450 Temperature calibration service □ ≤700°C □ each temperature range □

C251451 Temperature calibration service (>700°C, each temperature range)

