DORLAND Explosion-proof Smart Portable Pocket Infrared Thermal Camera EX Ti50F PRO

DORLAND System Control Tech Co., Ltd. has recently launched the EX Ti50F PRO, an explosion-proof smart portable pocket infrared thermal camera. The device features a 256*192 resolution and supports a 25Hz refresh rate for smooth image display, along with 3-megapixel visible light imaging and modes such as fusion and picture-in-picture.

In addition, it is suitable for outdoor construction, pipeline inspections, and other applications, and can be integrated with OA office systems, inspection positioning systems, data acquisition systems, and more. It is particularly ideal for hazardous environments with explosive risks, such as oil, chemical, pharmaceutical, oil storage, and tank farm areas where flammable and explosive gases are present, facilitating timely communication between users and production or dispatch teams.

IP Grade: IP54

Ex-marking: Ex ib IIC T4 Gb / Ex ib IIIC T130°C Db

Certificate No.: SYEx24.0286X

Infrared detector resolution: 256 * 192 pixels, auto-focus-free

3.5-inch color LCD, 640*480 pixel touchscreen

Temperature measurement range:

Range 1: -20°C to 150°C (-4°F to 302°F)

Range 2: 0°C to 550°C (+32°F to 1022°F)

Temperature measurement accuracy: ±2°C (±3.6°F) or ±2% of the reading (ambient temperature 10°C-35°C, object temperature >0°C)

3 MP Built-in Digital Camera

2180mAh high-capacity battery, lasting over 4 hours during operation

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Explosion proof certificate parameters		
Ex-marking	Ex ib IIC T4 Gb / Ex ib IIIC T130℃ Db	
Certificate No.	SYEx24.0286X	
IP Grade	IP54	
Appearance parameters		
Weight	200g	
Dimensions	224*77*96mm	
Thermal imaging technical parameters		
Optical parameters	Field of view angle/ minimum focusing distance	50°×37°/ 0.5m
	Thermal sensitivity (NETD)	<0.05°C @+30°C (+86°F) / 50mK
	Image frame rate	25Hz
	Focus mode	No focusing required
	Infrared resolution	256 * 192 pixels
Image parameters	LCD monitor	3.5-inch color LCD, 640 * 480 pixel touch screen
	Image mode	Infrared light, visible light, picture in picture, fusion
	Palette	Iron red, rainbow, white hot, black hot, brown hot, blue red, hot cold, feather, upper limit alarm, lower limit alarm, area alarm
Measurement	Temperature measurement range	Range 1: -20°C~150°C (-4°F~302°F)
		Range: 2:0°C~550°C (+32°F~1022°F)
	Precision	± 2°C (± 3.6°F) or ± 2% of the reading (ambient temperature 10°C~35°C, object temperature>0°C)
Measurement Analysis	Point analysis	Center point, three manual positions
	High and low temperature detection	Automatically capture the highest and lowest temperatures within the area
	line	Two line analysis
	noodles	Three sided analysis
	Measurement correction	Radiance rate, reflection temperature
Settings	Set command	Unit, language, date, time, information
	Language	multiple countries
Image Storage	Image file format	Standard JPEG or HIR files, including measurement data>6000 images
	Image file mode	Infrared and visible light
	Image analysis	Built in image analysis tool, function completion
Digital camera	Built in digital camera	3 MP

	Built in digital lens data	Field of view angle 65°
Data communication interface	Interface	USB-Type C
	USB	Data transmission between thermal imager and PC
		Real time video transmission between thermal imager and PC
	Wi-Fi	802.11, transmitting images and real-time video streams
Battery	Capacity	2180mAh, 3.85V
	Working hours	More than 4 hours
Environmental parameters	Working environment temperature	-15°C~50°C (5°F~122°F)
	Storage environment temperature	-40°C~70°C (-40°F~158°F)
	Environmental humidity (working and storage)	10%~90%
	Impact resistance	25g(1EC60068-2-29)
	Vibration resistance	2g(IEC60068-2-6)

CMA 210008349143

Explosion-proof electrical apparatus

CNAS 中国认可 检测 TESTING CNAS L1016

Conformity certificate of Explosion-proof

Certificate No. SYEx24.0286X

Manufacturer	Beijing Dorland System Control Technology Co. Ltd.
Address	11-A1, 10th Floor, Building 2, Yard 1, Wangzhuang Road, Haidian District, Beijing
Factory	Beijing Dorland System Control Technology Co. Ltd.
Address	11-A1, 10th Floor, Building 2, Yard 1, Wangzhuang Road, Haidian District, Beijing
Name of product	Explosion-proof Smart Portable Pocket Infrared Thermal Camera
Type specification	EX Ti50F
Ex-marking	Ex ib IIC T4 Gb; Ex ib IIIC T130℃ Db
Product standards	Q/DLM 011-2023 Drawing No. BZ01
Note	1. The product is powered by a single 664641 polymer lithium-ion battery (DC3.85V, 2180mAh). The battery is integrated with the protective board and internal circuit sealing. 2. Shell protection grade: IP54. 3. It is strictly prohibited to disassemble and replace batteries in hazardous locations.

According to the above examination of product designs drawings and technical documents, and sample inspection, it has been confirmed that the following standards are met:

GB/T 3836.1-2021	Explosive atmospheres-Part 1: Equipment-General requirements
GB/T 3836.4-2021	Explosive atmospheres-Part 4: Equipment protection by intrinsic safety "i"

Approved by

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Note: This certificate is valid only for products which are in agreement with the review and approval documents and test samples.