Beijing Dorland
System Control
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DORLAND
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Dorland Industrial Intrinsically Safe Smart Pocket Infra Imager EX Ti50F PRO

Dorland System Control Technology Co., Ltd. has recently launched the industrial intrinsically safe smart pocket infra imager EX Ti50F PRO, which has has a resolution of 256 * 192 and supports a refresh rate of 25Hz to maintain smooth images. It also supports 8 million pixel visible light images, dual light fusion, picture in picture, and other modes.

In addition, it is also suitable for outdoor construction, pipeline inspection, etc., and can be used in conjunction with various applications such as OA office systems, inspection positioning systems, data collection systems, etc. Especially suitable for harsh environments with hazardous explosions, such as petroleum, chemical, pharmaceutical, oil depots, tank areas, and other hazardous areas with flammable and explosive gases, facilitating timely communication between users and production and scheduling.

IP Grade: IP54

Ex-mark: Ex ib IIC T4 Gb / Ex ib IIIC T130℃ Db

Certificate No.: SYEx24.0286X



- The resolution of the infrared detector is 256 × 192 (49152 pixels), with a NETD<50 mK (@ 25 ℃, F #=1.0)
- Temperature measurement range: -20 ℃~400 ℃
- Temperature measurement accuracy: ± 2 ℃ or ± 2% (taking the maximum value)
- Support 1. ×~4. × continuous digital scaling
- Support automatic AGC, manual AGC, and one click AGC
- Frame rate: 25 Hz
- 8 MP visible light camera
- The battery life can reach 4 hours

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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	
Thermal imaging technical parameters		
Thermal imaging	Sensor type	Uncooled detector
	Response band	8~14 μm
	NETD (Noise Equivalent Temperature Difference)	<50 mk (@25℃, F# = 1.0)
	Maximum image size	256 × 192
	Thermal imaging lens focal length	3.5 mm
	Minimum imaging distance	0.3 m
	Field of view angle	50°× 37.5°
	Number doubling	1. ×~4. ×, with a minimum change of 0.1. x
	Frame rate	25 Hz
	pixel size	12 μm
	F value	F1.1
	Measuring range	-20℃~400℃
	accuracy	± 2 ℃ or ± 2%, take the maximum value
	Spatial Resolution (IFOV)	3.43 mrad
Visible light	Maximum image size	3264 x 2448
	Image resolution	Configurable: 2 MP, 5 MP, 8 MP
	Video resolution	640 × 480
Image display	monitor	3.5 " LCD capacitive touch screen 640 × 480
	Image mode	Supports 7 pseudo color modes including rainbow, iron red, etc
	Screen display	Visible light, thermal imaging, dual light fusion,

	mode	picture in picture
System function	Temperature measurement rules	Support hot, cold, and central points
	UVC projection screen	support
	Battery capacity	2180mAh
	Charging time	Fast charging to 94% battery in 1.5 hours, fully charged in 2.5 hours
	Bluetooth	support
	photograph	Thermal imaging, visible light, dual light fusion, picture in picture
	videotape	Thermal imaging, visible light, dual light fusion, picture in picture
	lighting	support
	Text Annotation	support
	Interface language	Default Chinese, English requires special customization
	Wi-Fi	support
	storage	16GB
	hardware interface	Type-C
	Battery working time	4h
System parameter	Tripod installation	Support, standard UNC ¼"-20 hole position
	Working temperature and humidity	-10℃~50℃，≤95%
	Anti fall level	2m
	weight	218g
	size	138.5mm x 85.2mm x 23.6mm
	parts	Adapter, data cable, cloth bag, lanyard, user manual
Client software	PC software	Support client
	APP	Support the Hot Test APP
	Screen casting	Support UVC screen mirroring

CMA 210008349143

防爆电气设备
Explosion-proof electrical apparatus

CNAS 中国认可 检测 TESTING CNAS L1016

防爆合格证

Conformity certificate of Explosion-proof

证书编号 Certificate No. SYEx24.0286X

制造商 Manufacturer	北京德兰系统控制技术有限公司
地址 Address	北京市海淀区王庄路 1 号院 2 号楼 10 层 11-A1
生产企业 Factory	北京德兰系统控制技术有限公司
地址 Address	北京市海淀区王庄路 1 号院 2 号楼 10 层 11-A1
产品名称 Name of product	防爆智能便携式口袋红外热成像仪
型号规格 Type specification	EX Ti50F
防爆标志 Ex-marking	Ex ib ⅡC T4 Gb; Ex ib ⅢC T130℃ Db
产品标准 Product standards	Q/DLM 011-2023
图样编号 Drawing No.	BZ01
备注 Note	1. 产品由单节 664641 聚合物锂离子电池（DC3.85V，2180mAh）供电，电池与保护板及内部电路浇封一体。 2. 外壳防护等级：IP54。 3. 严禁在危险场所拆卸及更换电池。

经对上述产品图样及技术文件的审查和样品检测，确认符合下列标准：
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 爆炸性环境 第 1 部分：设备 通用要求
GB/T 3836.4-2021 爆炸性环境 第 4 部分：由本质安全型“i”保护的设备

批准 Approved by

发证日期 Date of issue 2024-04-22

证书有效期至 Valid date 2029-04-21

机械工业低压防爆电器产品质量监督检测中心
Machinery Industry Product Quality Supervisory and Test Center of Low-Voltage Explosion-proof Electrical Product
沈阳电气传动研究所（有限公司）
Shenyang Electrical Driving Research Institute(Co.,Ltd)

SEDRI

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