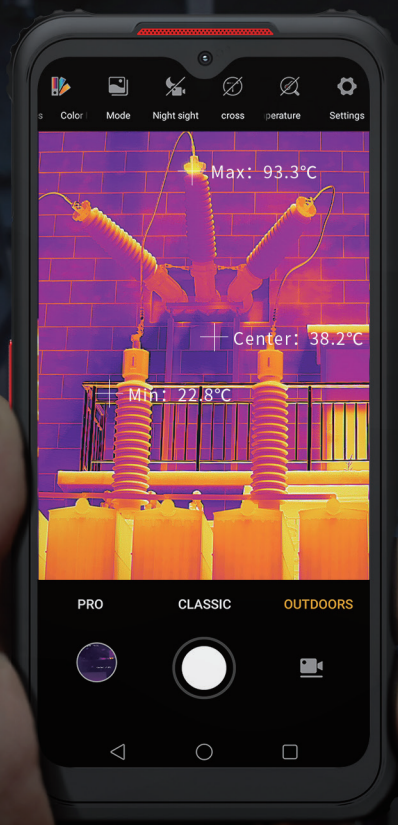




PX1

Industrial Thermal Imaging 5G Smart Device

Three-spectrum Sensing and 5G interconnection and All Under Control



PX1

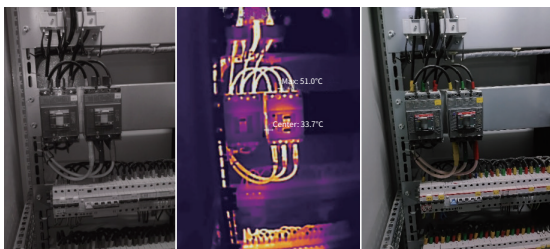
InfiRay PX1 5G Handheld Thermal Imaging Smart Device is a new product combining smartphone and thermal imaging.

It is with a built-in self-developed $12\mu\text{m}$ high-performance 256×192 uncooled infrared detector, dual night vision systems, and a 48-megapixel main camera which ensure no blind spots during a routine inspection. In addition to IP68/IP69K and MIL-STD-810H standard, it is also equipped with a 5500mA ultra-powerful battery. Thus, engineers can use it for long-time outdoor routine inspections in harsh environments.



1 Three-spectrum sensing, for imaging in various scenarios

- Three-spectrum system: PX1 features a three-spectrum system integrating 48-megapixel visible light imaging, 20-megapixel low light night vision, and 256×192 thermal imaging. It can work effectively for photo taking and measurement regardless of the light conditions. Therefore, engineers can use it for routine inspections at any time, without omission of any blind spot.



2 Professional image and temperature measurement algorithms, for high clarity and accuracy

- With minimum distinguishable difference of 0.04°C , temperature measurement accuracy of $\pm 2^\circ\text{C}$, and frame rate up to 25Hz, PX1 provides more detailed images and more accurate temperature data during routine inspections. Its wide-range temperature measurement from -20°C to $+550^\circ\text{C}$ meets the requirements of targets in different industries.



MATRIX III

3 5G smart platform + professional SDK, for continuously enriching app ecology

5G smart platform:

PX1 supports 5G to upload the captured images and videos captured anytime and anywhere. It achieves high-speed and delay-free interconnection, thus helping in the quick location of equipment defects.

Professional SDK:

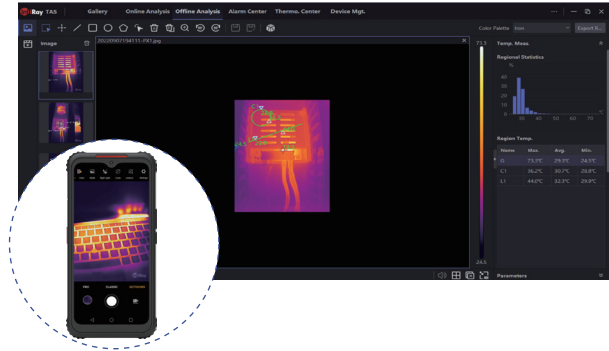
Professional SDK is provided for industry customers to develop their own platforms. Apps of large manufacturing enterprises, such as online vibration/centering/power quality (PQ) apps, can be developed on Android smart platforms.



4

Built-in professional App for temperature measurement and analysis, taking photo to analyze quickly and accurately

- The App supports drawing by temperature measurement tools and tracks the highest and lowest temperature. Moreover, it supports the whole-frame temperature measurement and displays the highest, lowest, center and the average temperature. Four image modes and nine palettes suit the habits of different users.
- The App supports image or video taking. Tap for test reports to improve work efficiency. For images taken by the App, InfiRay temperature measurement analysis software - TAS can carry out offline analysis and fault judgment.



5

Solid and Durable, for free and safety

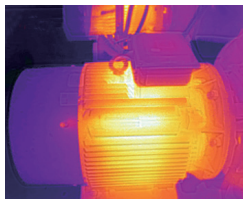
- Complying with the MIL-STD-810H standard, the solid and durable PX1 boasts the IP68/IP69K performance (waterproof and dustproof) and 1.5m-drop protection.
- Its 6.53" super-large waterdrop screen displays more information and gives a more comfortable experience. Wireless charging makes it more convenient to use.



Application Fields



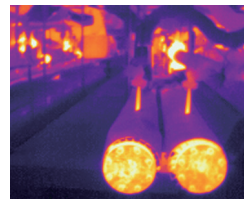
Outdoor adventure



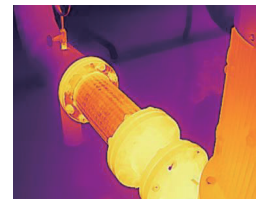
Equipment maintenance



Electric routine inspection



Industrial manufacturing



HVAC

Main Parameters

Model	Industrial Thermal Imaging 5G Smart Device PX1		
System and Frequency Band	2G/3G/4G	Frequency Band	GSM: 850,900,1800,1900 CMDA: BC0, BC1, BC10 WCDMA: B1,B2,B4,B5,B6,B8,B19 LTE-FDD: B1,B2,B3,B4,B5,B7,B8,B12,B13,B17,B18,B19,B20,B25,B26,B28AB,B66 LTE-TDD: B34 B38 B39 B40 B41
		CA	DL:CA_1A-3A、CA_39C、CA_40C、CA_41C、CA_39A-41A、CA_3C UL:CA_39C、CA_40C、CA_41C
		LTE Cat/Max Speed	DL:Cat12 400M (DL 256QAM) UL:Cat13 150M (UL 64QAM)
	5G	Frequency Band	n1, n2, n3, n5, n7, n8, n28, n41, n77, n78, n66
		NSA	Supported, Option 3x/3a
		SA	Supported, Option 2
	SIM Card Mode	MIMO	n1/n78/n41: downlink four streams, uplink single stream;
		Dual Cards	Supported, NR + LTE dual standby
		Active/Standby Card Switching	Supported
	Voice Standard	WCDMA WB	Supported
VOLTE		Supported	
VONR		Supported	
Appearance Design	Dimensions	172.8×82.2×14.5mm	
	Total Weight	317g	
	Custom Button	Supported	
Operating System	OS Version	Android 11	
CPU	Platform Name	Qualcomm Snapdragon eight-core processor	
Slot	Slot Quantity	Choose 2 of 3	
	SIM Card Hot Plugging	Supported	
Storage	Capacity	UFS2.2, 8G+256G	
	Expansion Memory (TF Card)	Supported, 512G	
Display	Screen	6.53"	
	Resolution	2340×1080	
	Feature	Waterdrop screen	
Rear Camera	Pixel	256×192 thermal imaging + 48MP visible light + 20MP black and white night vision + 2MP macro (visible light)	
	Visible Light Main Camera CMOS	SONY IMX582 / 48MP	
	Flashlight	Supported	
	Infrared Fill-in Light	Supported	
Front Camera	Pixel	16MP	
Infrared Thermal Imaging	Infrared Pixel	256×192	
	Pixel Pitch	12μm	
	Thermal Sensitivity/NETD	≤40mk	
	Measurement Range	-20℃~150℃ ; 100℃~550℃	
	FOV	56°×42.2°	
Sensor	Optical Sensor	Supported	
	Distance Sensor	Supported	
	Geomagnetic Sensor	Supported	
	Fingerprint Sensor	Supported	
	Gyroscope	Supported	
USB	Interface Type	TYPE-C, 3.0	
	OTG	Supported	
Earphone Interface	Earphone Interface Type	3.5mm interface	
Audio	MIC	Dual microphones	
	Speaker	1217 BOX	
WLAN	WLAN Protocol	802.11a/b/g/n/ac/ax-ready	
Satellite Positioning	Satellite Positioning	GPS, GLONASS, BeiDou	
Other Wireless Functions	Dual Frequency Positioning	Supported	
	Bluetooth	V5.0	
	NFC	Supported	
Reliability	Radio	Supported	
	Durability Test	In line with MIL-STD-810H	
Battery	IP Grade	IP68/IP69K	
	Typical Value	5500mAh	
	Maximum Charging Power	18W	
	Wireless Charging	Supported	
Accessories	Charger	18W	
	USB Cable	Yes	



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·The manual is for illustrative purposes only. The pictures and technical specifications are subject to change without notice.