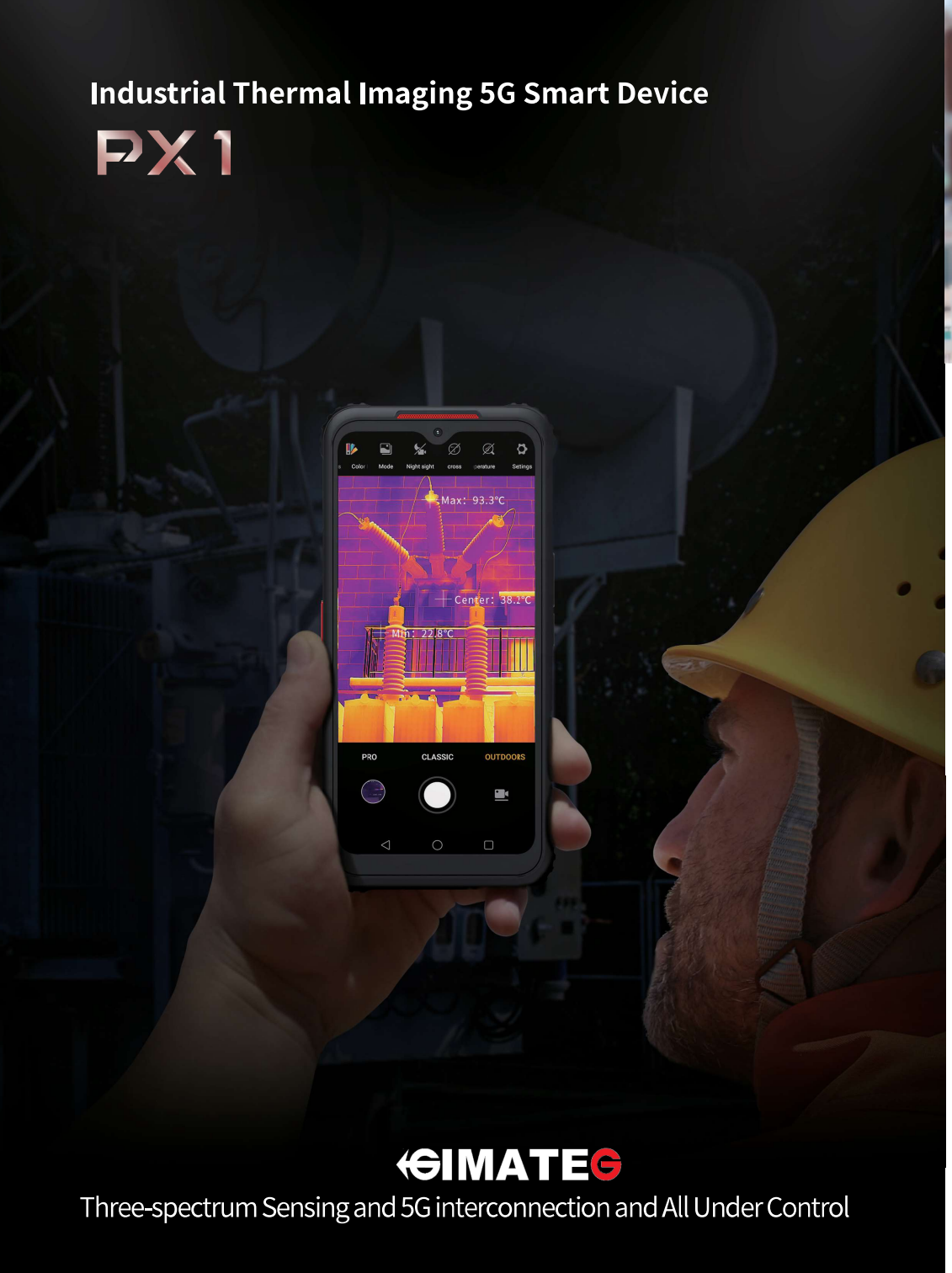
Industrial Thermal Imaging 5G Smart Device

PX1



GIMATEG

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

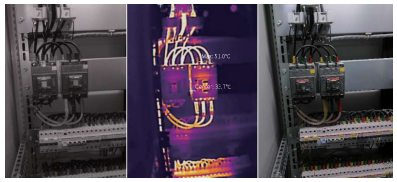
PX1

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 12μm 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 equiped with a 5500mA ultra-powerful battery. Thus, engineers can use it for long-time outdoor routine inspections in harsh environments.

InfiRay

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 ±2°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°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.

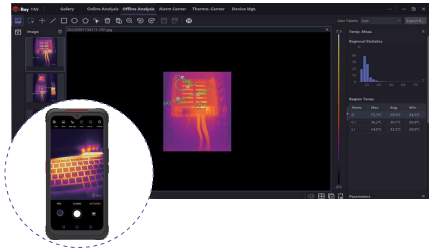
- **Professional SDK:**

  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
		MIMO	n1/n78/n41: downlink four streams, uplink single stream;
	SIM Card Mode	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°C~150°C ; 100°C~550°C
	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
	Dual Frequency Positioning		Supported
Other Wireless Functions	Bluetooth		V5.0
	NFC		Supported
	Radio		Supported
Reliability	Durability Test		In line with MIL-STD-810H
	IP Grade		IP68/IP69K
Battery	Typical Value		5500mAh
	Maximum Charging Power		18W
	Wireless Charging		Supported
Accessories	Charger		18W
	USB Cable		Yes