



See Heat, See More.

MobIR 3.0

The Smallest Dual-Vision Thermal Camera for iOS & Android Smartphone.

Introduction

MobIR 3.0 Series smartphone thermal camera is available in three configurations: 120 × 90, 256 × 192, and 256 × 192 dual-vision. Powered by proprietary ApexVision imaging technology, it delivers enhanced image clarity and reveals finer thermal details. With seamless compatibility for both iOS and Android, MobIR 3.0 connects easily to smartphones, enabling home monitoring, HVAC inspection, electrical fault diagnosis, equipment maintenance, outdoor adventure and more. Its compact plug-and-play design makes it highly portable and easy to operate anytime, anywhere.

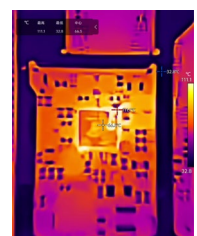
Features

- Proprietary ApexVision imaging technology for sharper, clearer thermal images with enhanced detail
- Available in 120×90, 256×192, and 256×192 dual-vision configurations
- Seamless compatibility with iOS and Android devices
- 5-second startup for instant and efficient inspections
- AI-powered multilingual assistant for easy operation and quick onboarding
- Aerospace-grade metal housing with IP54 protection and 2 m drop resistance for reliable durability

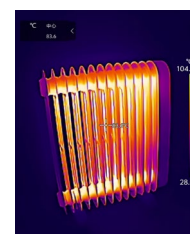
Applications



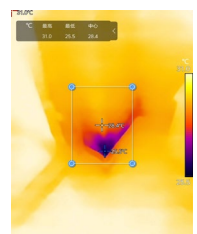
Electrical Diagnosis



PCBA Detection



HVAC Inspection



Building inspection

Specifications



Product model	ES1	ES2	ES2+
Imaging and optics			
Core technology	Equipped with full ApexVision S1 system architecture: Detector ApexCore S1 + Platform Nexus 1.0 + Algorithm SharpIR 2.0		
Detector type	VOx, 7.5 to 14μm		
Infrared resolution	120×90@12μm	256×192@12μm	
Super resolution	Support real-time super-resolution reconstruction, upgrade to 480×360	Support real-time super-resolution reconstruction, upgrade to 512×384	
NETD	≤15mK (@30℃)		
Frame rate	25Hz	30Hz	
Focal length	1.6mm	3.2mm	
Field of view	50°×38°	56°×42°	
IFOV	7.27mrad	3.82mrad	
Min. object distance	0.1m	0.3m	
D:S	138:1	262:1	
Focusing mode	Focus-free		
Measurement and analysis			
Measurement range	Support auto-switching: -20℃ to 150℃, 0℃ to 550℃		
Measurement accuracy	±2℃ or ±2%, whichever is greater		
Analyzed target	Spot, line, area		
Alarm	Available		
Image display			
Image mode	IR, PIP (Access to Mobile Phone Camera)		IR, VIS, MIF, PIP
Color palettes	12 and 1 customized		
Digital camera	/		800×600
Functions			
Recording function	Photo and Video		
Others	OTA update		
Storage and transmission			
External interface	USB Type-C Male Connector		
Power system			
Battery type	Battery-free (Powered by mobile phone), Power consumption: 310mW	Battery-free (Powered by mobile phone), Power consumption: 400mW	Battery-free (Powered by mobile phone), Power consumption: 620mW
Environmental parameters			
Working temperature	-20℃~50℃		
IP rating	IP54		
Drop	2m drop test		
Physical parameters			
Weight	25g	31g	32g
Size	51×24×15.1mm	58×24×17.6mm	
Software kit	FocusIR (iOS/Android)		
Standard	A device, Interface protective case, Carrying bag, Quick Start Guide, Warranty card		
Options	USB-C to Lightning Adapter (USB-C Female to Lightning Male), Magnetic macro lens (30x)	USB-C to Lightning Adapter (USB-C Female to Lightning Male), Magnetic macro lens (15x)	

MobIR 3.0 Smartphone & Tablet Compatibility

MobIR 3.0 supports a wide range of smartphones and tablets with a plug-and-play experience. Devices with a Lightning port require an optional USB-C to Lightning adapter (USB-C female to Lightning male), available from our official channels.

iPhone: iPhone 15 series and later models support direct connection via USB-C; iPhone 14 series and earlier models require a USB-C to Lightning adapter.

iPad: iPad models with a USB-C port support direct connection; iPad models with a Lightning port require a USB-C to Lightning adapter.

Android / HarmonyOS: Supports direct USB-C connection with Android devices and HarmonyOS devices based on the Android ecosystem; currently not compatible with HarmonyOS NEXT devices.



USB-C to Lightning Adapter