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CHENGEN THERMOVISION

Shenzhen Chengen Thermovision Technology Co., Ltd.

Product Catalog

Shenzhen Chengen Thermovision Technology Co., Ltd.

Chengen founded in 2015, is a high-tech enterprise specializing in thermal imaging products. Since its inception, Chengen has been deeply dedicated to the field of infrared thermal imaging, investing heavily in the development of a wide range of thermal imaging devices. Through years of continuous innovation, the company has accumulated extensive technical expertise and built an outstanding R&D team with rich development experience, providing strong support for business operations. Today, Chengen possesses advanced and mature technologies, enabling the development and production of high-performance , reliable products , and is capable of offering comprehensive OEM and ODM services to its clients.



2 *Factory buildings*

13000m² *Factory area*

350+ *Staff*



TK-C Series Thermal Imaging Sight Scope

Product Features

Detector Resolution	Pixel Pitch
256 / 384 / 640	12μm
Lens	Frame Rate
25/ 35 /50mm	50Hz
Digital Zoom	NETD
1x~8x	< 35mK

Size	Pseudo-color Modes
144x86x63mm/155x86x63mm 170x86x63mm	White Hot , Black Hot, Red Hot, Iron Red, etc.

Model	TK-C225	TK-C335	TK-C350	TK-C635	TK-C650
Focal Length (mm)	25	35	50	35	50
FOV	7x5.3°	7.5x5.7°	5.3x4°	5.3x4°	8.8x7°
Detection Distance	2500m	3500m	5000m	3500m	5000m
Recognition Distance	625m	875m	1250m	875m	1250m
Identification Distance	313m	438m	625m	438m	625m
Detector Resolution	256x192, 12μm	384x288, 12μm	384x288, 12μm	640x512, 12μm	640x512, 12μm
Display Resolution	OLED 0.32 800x600	OLED 0.39 1024x768	OLED 0.39 1024x768	OLED 0.39 1024x768	OLED 0.39 1024x768
NETD	<25mK	<35mK	<35mK	<35mK	<35mK
Detector Type	Uncooled Focal Plane Array Detector (VOX - Vanadium Oxide)				
Spectral Response	8-14μm				
Frame Rate	50Hz				
Button Operation	2 Buttons + 1 Rotary Encoder				
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.				
Digital Zoom	1X-8X Zoom				
Shutter Mode	Manual, Auto Shutter				
Function Menu	NUC, Digital Filtering and Noise Reduction, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Auto Power-off, Restore Default Settings, DDE, Removable Battery, Version Information, Gyroscope, Blind Pixel Calibration, Ballistic Calculation, Accelerometer, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode, Image Super-Resolution (SR).				
Battery Capacity	Single Cell 18650 / 3400mAh				
Storage Memory	32G				
Operating Time	5H(Individual Observation Time)				
IP Rating	IP66				
Shock	1000g				
Weight (Including Battery)	551g	592g	669g	592g	669g
Size	144x86x63mm	155x86x63mm	170x86x63mm	155x86x63mm	170x86x63mm
Housing Material	Metal				
Operating Environment	-20C° ~ +60C°				



TK-T Series Thermal Imaging Sight Scope

Product Features

Detector Resolution
256x192

Lens
25mm

Digital Zoom
1x-8x

Size
141x83x57mm

Pixel Pitch
12µm

Frame Rate
50Hz

NETD
< 25mK

Pseudo-color Modes
White Hot, Black Hot,
Red Hot, Iron Red, etc.

Model	TK-T225
Focal Length (mm)	25
FOV	7x5.3°
Detection Distance	2500m
Recognition Distance	625m
Identification Distance	313m
Detector Resolution	256x192, 12µm
Display Resolution	OLED 0.32 800x600
NETD	< 25mK
Detector Type	Uncooled Focal Plane Array Detector (VOx - Vanadium Oxide)
Spectral Response	8-14µm
Frame Rate	50Hz
Button Operation	2 Buttons + 1 Rotary Encoder
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.
Digital Zoom	1X - 8X Zoom
Shutter Mode	Manual, Auto Shutter
Function Menu	NUC, Digital Filtering and Noise Reduction, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Auto Power-off, Restore Default Settings, DDE, Removable Battery, Version Information, Gyroscope, Blind Pixel Calibration, Ballistic Calculation, Accelerometer, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode, Image Super-Resolution (SR).
Battery Capacity	Single Cell 18650 / 3400mAh
Storage Memory	32G
Operating Time	5H (Individual Observation Time)
IP Rating	IP66
Shock	1000g
Weight (Including Battery)	488g
Size	141x83x57mm
Housing Material	Metal
Operating Environment	-20C° ~ +60C°



ZS Series Thermal Imaging Sight Scope

Product Features

Detector Resolution
384x288 / 640x512

Lens
25 / 35 / 50mm

Digital Zoom
1x-8x

Size
137x91x65mm / 178x91x65mm
185x91x65mm

Pixel Pitch
12μm

Frame Rate
50Hz

NETD
< 35mK

Pseudo-color Modes
White Hot , Black Hot, Red Hot, Iron Red, etc.

Model	ZS325	ZS335	ZS350	ZS635	ZS650
Focal Length (mm)	25	35	50	35	50
FOV	10.5x7.9°	7.5x5.7°	5.3x4°	5.3x4°	8.8x7°
Detection Distance	2500m	3500m	5000m	3500m	5000m
Recognition Distance	625m	875m	1250m	875m	1250m
Identification Distance	313m	438m	625m	438m	625m
Detector Resolution	384x288, 12μm			640x512, 12μm	
Display Resolution	OLED 0.39 1024x768				
NETD	< 35mK (@25°C,F#=1.0)				
Detector Type	Uncooled Focal Plane Array Detector (VOx - Vanadium Oxide)				
Spectral Response	8-14μm				
Frame Rate	50Hz				
Button Operation	2 Buttons + 1 Encoder				
Pseudo-color Modes	White Hot , Black Hot, Red Hot, Iron Red, etc.				
Digital Zoom	1X-8X Zoom				
Shutter Mode	Manual, Auto Shutter				
Function Menu	NUC, Digital Filtering and Noise Reduction, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Restore Default Settings, Removable Battery, Version Information, DDE, Gyroscope, Blind Pixel Calibration, Ballistic Calculation, Accelerometer, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode, Clip-on Mode.				
Battery Capacity	Single Cell 18650 / 3400mAh				
Storage Memory	32G				
Operating Time	5H(Individual Observation Time)				
IP Rating	IP66				
Shock	1000g				
Weight (Including Battery)	597g	638g	708g	638g	708g
Size	137x91x65mm	178x91x65mm	185x91x65mm	178x91x65mm	185x91x65mm
Housing Material	Metal				
Operating Environment	-20C° ~ +60C°				



TB Series Thermal Imaging Sight Scope

Product Features

Detector Resolution
384x288/640x512

Lens
35 / 50mm

Digital Zoom
1x-8x

Size
134x80x62mm

Pixel Pitch
12µm

Frame Rate
50Hz

NETD
< 35mK

Pseudo-color Modes
White Hot , Black Hot,
Red Hot, Iron Red, etc.

Model	TB335	TB350	TB635	TB650
Focal Length (mm)	35	50	35	50
FOV	7.5x5.7°	5.3x4°	5.3x4°	8.8x7°
Detection Distance	3500m	5000m	3500m	5000m
Recognition Distance	875m	1250m	875m	1250m
Identification Distance	438m	625m	438m	625m
Detector Resolution	384x288, 12µm		640x512, 12µm	
Display Resolution	OLED 0.39 1024x768			
NETD	< 35mK (@25°C,F#=-1.0)			
Detector Type	Uncooled Focal Plane Array Detector (VOx - Vanadium Oxide)			
Spectral Response	8-14µm			
Frame Rate	50Hz			
Button Operation	2 Buttons + 1 Dial Switch			
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.			
Digital Zoom	1X-8X Zoom			
Shutter Mode	With Shutter, Auto Shutter mode			
Function Menu	NUC, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Removable Battery, Restore Default Settings,Version Information, DDE, Gyroscope, Blind Pixel Calibration, Ballistic Calculation, Accelerometer, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode, Clip-on Mode.			
Battery Capacity	Single Cell 18650 / 3000mAh			
Storage Memory	32G			
Operating Time	3H(Individual Observation Time)			
IP Rating	IP66			
Shock	1000g			
Weight (Including Battery)	550g	578g	550g	578g
IP Rating	134x80x62mm	136x80x62mm	134x80x62mm	136x80x62mm
Housing Material	Metal			
Operating Environment	-20C° ~ + 60C°			



QM Series Thermal Imaging Sight Scope

Product Features

Detector Resolution
640x512 / 1280x1024

Lens
35 / 50 /60mm

Digital Zoom
1x-8x

Waterproof Rating
IP66

Pixel Pitch
12μm

Frame Rate
50Hz

NETD
< 25mK

Pseudo-color Modes
White Hot , Black Hot,
Red Hot, Iron Red, etc.

Model	QM635	QM650	QM650
Focal Length (mm)	35	50	60
FOV	12.5x10°	8.8x7°	14.6x11.7°
Detection Distance	3500m	5000m	6000m
Recognition Distance	875m	1250m	1500m
Identification Distance	438m	625m	750m
Detector Resolution	640x512, 12μm		1280x1024, 12μm
Display Resolution	OLED 0.6 1280x1024		
NETD	< 25mK (@25°C,F#=1.0)		
Detector Type	Uncooled Focal Plane Array Detector (VOX - Vanadium Oxide)		
Spectral Response	8-14μm		
Frame Rate	50Hz		
Button Operation	3 Buttons + 1 Rotary Encoder		
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.		
Digital Zoom	1X-8X Zoom		
Shutter Mode	Manual, Auto Shutter		
Function Menu	NUC, Digital Filtering and Noise Reduction, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Restore Default Settings, Removable Battery, Version Information, DDE, Gyroscope, Blind Pixel Calibration, Ballistic Calculation, Accelerometer, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode, Auto Power-off, Clp-on Mode.		
Battery Capacity	Single Cell 18650 / 3400mAh		
Storage Memory	32G		
Operating Time	5H(Individual Observation Time)		
IP Rating	IP66		
Shock	1000g		
Housing Material	Metal		
Operating Environment	-20C° ~ +60C°		



CE Series

Handheld Thermal Imager

Product Features

Detector Resolution	Pixel Pitch
256X192 / 384X288	12μm
Lens	Frame Rate
10 / 15 / 19 / 25mm	50Hz
Digital Zoom	NETD
1x~8x	< 35mK
Size	Pseudo-color Modes
180x55mm	White Hot , Black Hot, Red Hot, Iron Red, etc.

Model	CE-210	CE-215	CE-315	CE-319	CE-325
Focal Length (mm)	10	15	15	15	25
FOV	17.5x13.2°	11.7x8.8°	17.5x13.2°	13.9x10.4°	10.6x7.9°
Detection Distance	1000m	1500m	1500m	1900m	2500m
Recognition Distance	250m	375m	375m	475m	625m
Identification Distance	125m	188m	188m	258m	313m
Detector Resolution	256x192, 12μm		384x288, 12μm		
Display Resolution	OLED 0.32 800x600		OLED 0.39 1024x768		
NETD	< 35mK(@25°C,F#=1.0)				
Detector Type	Uncooled Focal Plane Array Detector (VOx - Vanadium Oxide)				
Spectral Response	8-14μm				
Frame Rate	50Hz				
Button Operation	5 Buttons				
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.				
Digital Zoom	1X-8X Zoom				
Shutter Mode	With Shutter, Auto Shutter mode				
Function Menu	NUC, Noise Reduction, CVBS, Crosshair, Wi-Fi Hotspot, Video Recording, Infrared Laser, Hotspot Tracking, Auto Power-Off, Restore Factory Defaults, Version Information, OSD, Blind Pixel Calibration, Probabilistic Ranging, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode.				
Battery Capacity	Single Cell 18650 / 3000mAh				
Storage Memory	32G				
Operating Time	5H(Individual Observation Time)				
IP Rating	IP66				
Power Consumption	≤ 1.5w				
Weight (Including Battery)	389g				
Size	180x55mm				
Housing Material	Plastic				
Operating Environment	-20C° + 60C°				



CE Series Handheld Thermal Imager

Product Features

Detector Resolution
640x512

Lens
35 / 50mm

Digital Zoom
1x-8x

Size
215x55mm / 235x55mm

Pixel Pitch
12μm

Frame Rate
50Hz

NETD
< 35mK

Pseudo-color Modes
White Hot , Black Hot,
Red Hot, Iron Red, etc.

Model	CE-635	CE-650
Focal Length (mm)	35	50
FOV	7.5x5.7°	8.8x7°
Detection Distance	3500m	5000m
Recognition Distance	875m	1250m
Identification Distance	438m	625m
Detector Resolution	640x512, 12μm	
Display Resolution	OLED 0.39 1024x768	
NETD	< 35mK (@25°C,F#=1.0)	
Detector Type	Uncooled Focal Plane Array Detector (VOX - Vanadium Oxide)	
Spectral Response	8-14μm	
Frame Rate	50Hz	
Button Operation	5 Buttons	
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.	
Digital Zoom	1X-8X Zoom	
Shutter Mode	With Shutter, Auto Shutter mode	
Function Menu	NUC, Noise Reduction, CVBS, Crosshair, Wi-Fi Hotspot, Video Recording, Infrared Laser, Hotspot Tracking, Auto Power-Off, Restore Factory Defaults, Version Information, OSD, Blind Pixel Calibration, Probabilistic Ranging, PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast, Digital Zoom, Shutter Mode.	
Battery Capacity	Single Cell 18650 / 3000mAh	
Storage Memory	32G	
Operating Time	5H(Individual Observation Time)	
IP Rating	IP66	
Power Consumption	≤ 1.5w	
Weight (Including Battery)	535g	547g
Size	215x55mm	235x55mm
Housing Material	Plastic	
Operating Environment	-20C°+60C°	



JC Series Thermal Imaging Handheld Mountable Device

Product Features

Detector Resolution 384x288 / 640x512	Pixel Pitch 12μm
Lens 15 / 19 / 25 / 35mm	Frame Rate 50Hz
Digital Zoom 1x-8x	NETD < 35mK
Size 82x59x56mm / 90x59x56mm	Pseudo-color Modes White Hot , Black Hot, Red Hot, Iron Red, etc.

Model	JG2315	JG2319	JG2325	JG2625	JG2635
Focal Length (mm)	15	19	25	25	35
FOV	17.5x13.2°	13.9x10.1°	10.6x7.9°	17.5x14.1°	12.6x10.1°
Detection Distance	1500m	1900m	1500m	2500m	3500m
Recognition Distance	375m	475m	375m	625m	875m
Identification Distance	188m	237m	188m	313m	438m
Detector Resolution	384x288, 12μm			640x512, 12μm	
Display Resolution	5" LED, 1280×720				
NETD	< 35mK (@25℃,F#=1.0)				
Detector Type	Uncooled Focal Plane Array Detector (VOx - Vanadium Oxide)				
Spectral Response	8~14μm				
Frame Rate	50Hz				
Button Operation	3 Buttons				
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.				
Scene Modes	User, Plain, Forest				
Digital Zoom	1X-8X Zoom				
Shutter Mode	With Shutter, Auto Shutter mode				
Function Menu	Crosshair, Infrared Laser, Brightness, Contrast, Digital Zoom				
Power Consumption	≤ 1w				
Weight	230g	230g	253g	253g	261g
Dimension	82x59x56mm	82x59x56mm	90x59x56mm	90x59x56mm	100x59x56mm
Housing Material	Plastic				
Operating Environment	-20C°~ +60C°				



XQ Series Handheld Thermal Imager

Product Features

Detector Resolution	Pixel Pitch
384X288 / 640X512	12μm
Lens	Frame Rate
25 / 35 / 50mm	50Hz
Digital Zoom	NETD
1x~8x	< 35mK

Size	Pseudo-color Modes
154x73x44mm / 165x73x44mm 180x73x44mm	White Hot , Black Hot, Red Hot, Iron Red, etc.

Model	XQ325	XQ335	XQ650
Focal Length (mm)	25	35	50
FOV	10.6x7.9°	7.5x5.7°	8.8x7°
Detection Distance	2500m	3500m	5000m
Recognition Distance	625m	875m	1250m
Identification Distance	313m	438m	625m
Detector Resolution	384x288, 12μm		640x512, 12μm
Display Resolution	OLED 0.39 1024x768		
NETD	< 35mK (@25°C,F#=1.0)		
Detector Type	Uncooled Focal Plane Array Detector (VOX - Vanadium Oxide)		
Spectral Response	8~14μm		
Frame Rate	50Hz		
Button Operation	5 Buttons		
Pseudo-color Modes	White Hot (default), Black Hot, Red Hot, Iron Red, etc.		
Digital Zoom	1X-8X Zoom		
Shutter Mode	Manual, Auto Shutter		
Function Menu	NUC, Image Detail Enhancement, Digital Filtering and NoiseReduction, CVBS, Removable Battery, Crosshair, WIFI Hotspot, Photo and Video Recording, Laser Rangefinder, Restore Default Settings, Version Information, Gyroscope, Blind Pixel Calibration,PIP, Mobile App, Bad Pixel Correction, Brightness, Contrast,Digital Zoom, Shutter Mode.		
Battery Capacity	Single Cell 18650 / 3400mAh		
Storage Memory	32G		
Operating Time	5H (Individual Observation Time)		
IP Rating	IP66		
Power Consumption	≤ 1.8w		
Weight (Including Battery)	469g	510g	587g
IP Rating	154x73x44mm	165x73x44mm	180x73x44mm
Housing Material	Metal		
Operating Environment	-20C° ~ +60C°		



Resolution
256x192

Lens
3.2mm

Housing Material
Metal

Size
70x43x15mm

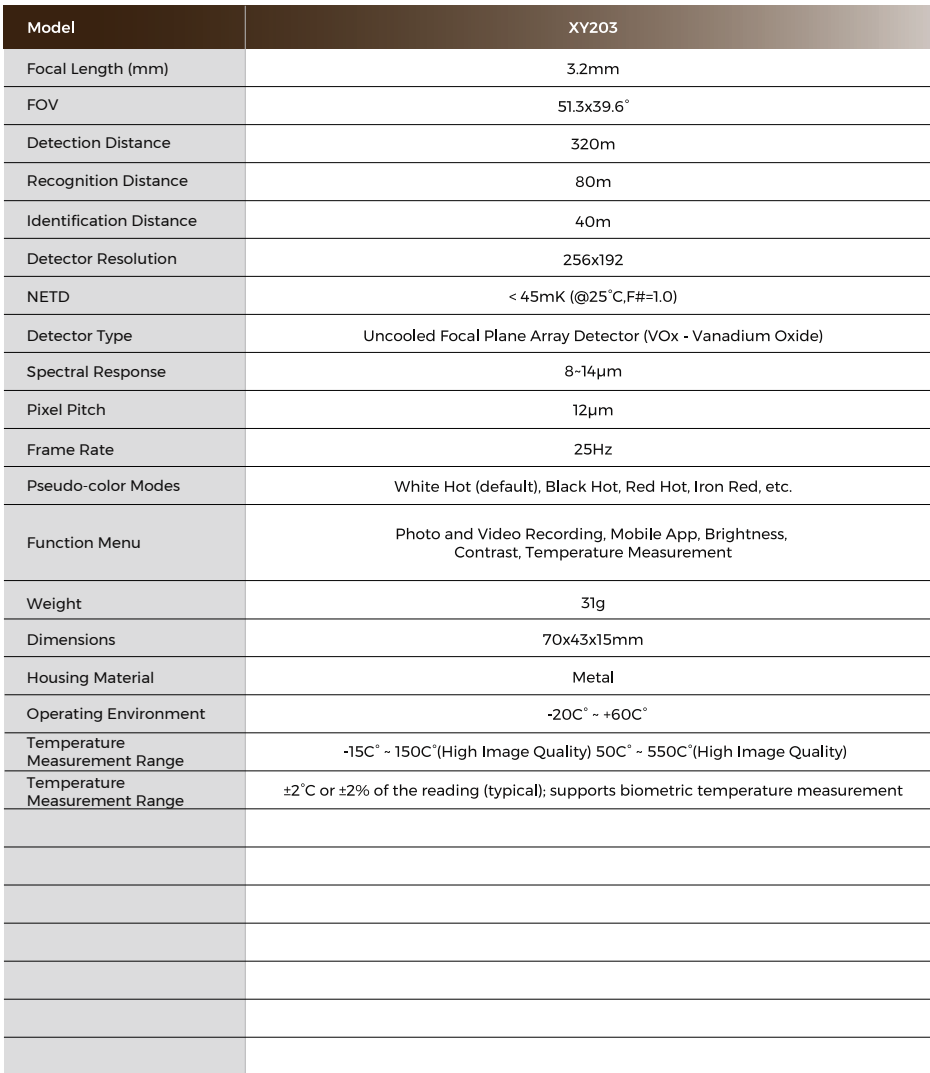
Pixel Pitch
12μm

Video Transmission

NETD
< 45mK

Pseudo-color Modes

White Hot , Black Hot,
Red Hot, Iron Red, etc.



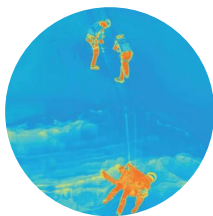


7 Vehicle-Mounted Thermal Imaging

Product Features

Resolution 256x192	Pixel Pitch 12μm
Lens 10mm	Frame Rate 25Hz
FOV 18x13°	NETD 50mK
Display Screen Size 7 Inches	Alarm Method Built-in Speaker Alarm

Model	L7 Vehicle-mounted Thermal Imaging
Thermal Imaging Camera Parameters	
Spectral Response Range	8-14μm
NETD	50mk
Resolution	256x192
Pixel Pitch	12μm
Lens	10mm
FOV	18x13°
Frame Rate	25Hz
Display Unit Parameters	
Dimension	7 Inches
Resolution	1024x600
System	LINUX
Recognition Type	People and Vehicles
Recognition Rate	≥ 95 %
GPS	Built-in
Alarm Mode	Built-in Speaker Alarm
Other Parameters	
Lens Protection	High-strength Protective Window
Window Defrosting	Aluminum Alloy Housing, IP67 Sealed
Size	40x30x26mm
Weight	About 100g
Operating Voltage	9-24V
Power	5W
Main Unit Dimensions	180x30x117mm
Weight	360g



HF609-PRO Dual-Spectral Drone

Product Features

Detector Resolution
640x512

Gimbal
Three-axis

Positioning System
GNSS / Optical Flow / TOF

Size
520x440x96mm

Battery
4200mAh

Video Transmission
Relay Digital Video Transmission

Wind Resistance Level
Level 6

Pseudo-color Modes
White Hot , Black Hot,
Red Hot, Iron Red, etc.

Model		HF609-PRO	
Size		Unfolded: 520×440×96mm	
Weight		Approximately 750g (including battery)	
Max Ascend Speed		2.5m/s	
Max Descend Speed		4m/s	
Max Horizontal Flight Speed		9m/s	
Control Range		4 km	
Endurance Time		Hovering Time: 34 min	
		Flight Time: 25 min	
Max Wind Resistance Level		Level 6	
Hovering Accuracy		Vertical: ±0.2m (Visual Mode), ±0.8m (GPS Mode)	
		Horizontal: ±0.3m (Visual Mode), ±1.5m (GPS Mode)	
Gimbal		Stabilization System: Three-axis Brushless Gimbal	
Visible Light Camera		Sensor: Sony IMX586, 48 Megapixels Focal Length: 8mm Resolution: 8000x6000 Image Format: JPG Video Format: MP4 Video Resolution: 4K / 30fps	
Thermal Imaging Camera		Uncooled VOx (Vanadium Oxide) Sensor: 640x512 FOV (Field of View): 46°x38° Aperture: f / 1.0 Focal Length: 9mm Image Format: JPG Video Format: MP4	
Video Transmission		5G Relay Digital Video Transmission	
Positioning System		GNSS / Optical Flow / TOF	
Perception System		Front-view Precision Perception Range: 0.3 to 15 meters Effective Obstacle Avoidance Speed: ≤ 4m/s Field of View: 60°	Rear-view Precision Perception Range: 0.3 to 15 meters Effective Obstacle Avoidance Speed: ≤ 4m/s Field of View: 60°
Battery		4200mAh	



MF Series Gps Thermal Imaging Drone

Product Features

Detector Resolution
640x512

Cimbal
Single-axis

Positioning System
GNSS / Optical Flow / TOF

Size
385x345x65mm

Battery
3200mAh

Video Transmission
Relay Digital Video Transmission

Wind Resistance Level
Level 4

Weight
Approximately 350g

Model	MF609
Size	Unfolded: 385×345×65mm
Weight	Approximately 350g (including battery)
Max Ascend Speed	2.5m/s
Max Descend Speed	3m/s
Max Horizontal Flight Speed	8m/s
Maximum Flight Altitude	120m
Max Tilt Angle	35°
Max Rotation Angular Speed	60°/s
Operating Temperature	0°C ~ 40°C
Positioning System	GNSS / Optical Flow
Hovering Accuracy	Indoor: Vertical ±0.3m, Horizontal ±0.3m
	Outdoor: Vertical ±0.5m, Horizontal ±1.5m
EIRP	22dB-26dB
Pitch Angle	0° ~ -90°
Thermal Imaging Camera Resolution	640x512
Thermal Imaging Camera	Sensor: 640x512 FOV (Field of View): 49°x39° Aperture: f / 1.0 Focal Length: 9mm
ISO range	Photo :50-1600(automatic)
	Video :50-1600(automatic)
Electronic Shutter Speed	1 / 25s - 1 / 8000s
SD Storage	Photo Resolution: 5700x3200 Video Resolutions: 4K: 3840x2160 @ 25FPS 2.7K: 2688x1512 @ 25FPS 2K: 2048x1080 @ 50FPS
App Storage	Photo Resolution: 5700x3200
	Video Resolution: 1280x720

APPLICATION SCOPE



Hunting



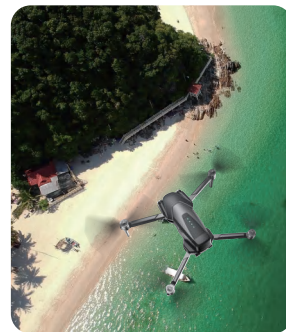
Wildlife Monitoring



Camping



Search & Rescue



Drone Inspection

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