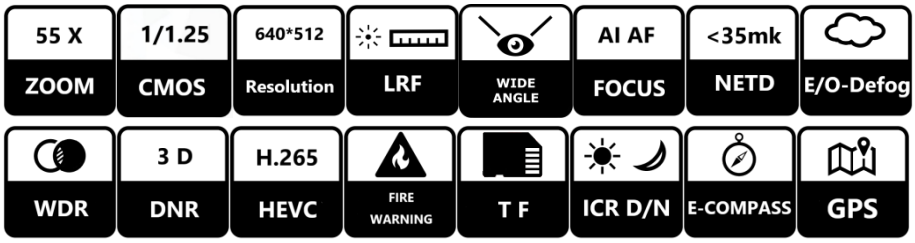
The ultimate 5-in-1 Smart PTZ camera



- Visible camera, thermal camera, rangefinder, laser illumination and wide angle camera, 5-in-1 Integrated System
- Direct drive torque motor for high accuracy and fast rotation
- Full HD 8 MP 3840x2160@30fps real-time images
- 10-550mm, 55X optical zoom
- Thermal image 640x512, NETD sensitivity≤ 35mK @F1.0,300K
- 3km laser ranging, 1535nm wavelength
- 500m laser illumination;
- Horizontal and vertical stabilization, dynamic adjustment to offset the external vibration of the pan-tilt unit and ensure the stability of image quality.
- AI-AF deep learning , focusing on faster speed and more stable focus
- Support WebRTC and FLV image preview
- Support backlight compensation, automatic electronic shutter and other functions to adapt to different monitoring environments
- Support 3D digital noise reduction, strong light suppression, heat wave removal;
- Supports max. 256G Micro SD storage
- Supports ONVIF and GB/T28181 access
- Support human, non-motor vehicle, motor vehicle, boat and bird detection algorithm;
- Widely used in high-definition and intelligent monitoring scenarios such as airports, railways, ports, vessel, smart transportation, drone detection, Forest fire prevention, electricity, border and coastal defense etc；

Product	**WDM-M5800G**				
Thermal Camera					
Type of probe	Vanadium oxide non-cooling infrared detector				
Effective Pixels	640x512				
Pixel pitch	12μm				
Spectral range	8~14μm				
Sensitivity (NETD)	≤35 mK @F1.0, 300K				
Lens type	Fixed or Zoom lens				
Focal length	50mm	75mm	100mm	25-75mm	15-100mm
Digital zoom	2X, 4X, 8X				
Aperture	F1.0			25mm(F0.9)-75mm(F1.1)	15mm(F0.85)-100mm (F1.25)
FOV (H x V)	8.8°x7.0°;	5.9°x4.7°;	4.4°X3.5°;	17.5°X14.0°~5.9°X4.7°	28.7°X 23.1°~4.4° X 3.5°
Focus range	3M~∞ ;	5M~∞ ;	10M~∞ ;	5M~∞ (25MM) 10M~∞ (75MM)	5M~∞ (15MM) 10M~∞ (100MM)
Image settings	Brightness, contrast, and gamma are adjustable through the client or browser				
Pseudo Color	10 modes available, white hot/ black hot/golden autumn/rainbow/iron red, etc.				
Image enhancement	Supports 0-255 level adjustment				
Bad pixel correction	Support				
Image noise reduction	Support				
Image Flip	180°, Mirror				
Shockproof	Electronic anti-shake, 1-3 level adjustment				
Visible Camera					
Sensor type	1/2.8”;	1/1.8”;	1/1.25”		
Resolution	1920x1080@25/30fps 60fps optional	2688x1520@25/30fps 60fps optional	3840×2160@25/30fps 60fps optional		
Min. Illumination1	Color: 0.0005 Lux ; Black and white: 0.0001Lux				
Shutter	1/25s to 1/100,000s; Support delayed shutter				
Day/Night Switch	ICR infrared filter type; automatic, manual, timing, serial port trigger, alarm trigger				
Focal length	7~322mm	6.6~264mm	10~550mm		
Aperture	F1.8-F6.5;	F1.61-F5.19;	F1.5-F5.5		
	H:42-1° (wide-tele)	H:59.20-1.93° (wide-tele)	H:58.40-1.20° (wide-tele)		

Field of view (H, V, D)	V:24-0.6° (wide-tele)	V:34.82-1.14° (wide-tele)	V:34.90-0.70° (wide-tele)
	D:47.7-1.26° (wide-tele)	D:68.68-2.24° (wide-tele)	D:65.10-1.40° (wide-tele)
Image Settings	Saturation, Brightness, Contrast and Sharpness can be adjusted via the client-side or browser		
BLC,HLC,WDR	Support		
Defog	E-Defog		
Day/night switching	Automatic, manual, timing, alarm trigger		
3DNR	Support		
Image overlay	Support BMP 24-bit image overlay, customizable area		
Region of interest	Support three streams and four fixed areas		
Electronic slow shutter	X2—X24		
Distortion correction	Support, 0-100 level adjustment		
Shockproof	Electronic anti-shake, 1-3 level adjustment		
Illumination			
Illumination distance	≥500m		
Wavelength	850nm±10nm (940nm optional)		
The Angle of the light	Electrically synchronized zoom, Far Angle 2°: effective distance>500m, spot diameter <36m; Near Angle 70°: effective distance>40m;		
Time to change ratio	≤ 3 seconds (far to near)		
Rangefinder[2]			
Wavelength	1535nm		
Range	15m-3000m		
Accuracy	±1m		
Resolution	0.1m		
Frequency	1Hz		
Wide Angle Camera[2]			
Sensor type	1/1.8” Progressive Scan CMOS		
Resolution	2688x1520		
Focal Length	4mm		
Field of View	H: 93.1° V:49.6° D:110.8°		
PTZ			
Transmission form	Direct drive torque motor		

Rotation	Pan: 360° continuous rotation; Tilt: ±90°
Speeds	Pan: 0.09°~120°/s (expandable), Tilt 0.09°~110°/s (expandable)
Maximal acceleration	Level 300°/s², pitch 240°/s²
Angular resolution	0.01 °
Accuracy	≤0.05 °
Preset position	199 (standard user preset bits) +255 (extended user preset bits) The number of preset bits can be increased to 512 according to the customer
Scan pattern	Preset point scanning (adjustable preset time, adjustable preset scanning speed), horizontal two-point scanning (adjustable scanning speed, adjustable scanning time)
Locate function	Absolute Angle positioning (adjustable positioning speed), 3D positioning (adjustable positioning speed)
Image	
Main stream	Thermal:25fps(1920x1080, 1280x1024, 640x512); Visible:25fps/30fps (3840x2160, 2688x1520, 1920x1080, 1280x960, 1280x720);@8MP 25fps/30fps (2688×1520, 2560x1440, 1920x1080, 1280x960, 1280x720);@4MP 25fps/30fps (1920x1080, 1280x960, 1280x720);@2MP
Sub-stream	Thermal:25fps(640x512); Visible:25fps (1280×720, 704x576, 640x480, 352x288) @8MP/4MP 25fps (704x576, 640x480 ,352x288) @2MP 30fps (1280×720, 704x480, 640x480, 352x240)@8MP/4MP 30fps (704x480, 640x480, 352x240)@2MP
Third stream	Visible:25fps (704x576, 640x480, 352x288) 30fps (704x480, 640x480, 352x240) Only for Model UV-ZDF35IXXXXX 25fps (1920×1080, 1280×720,704×576, 640×480, 352×288) 30fps (1920×1080, 1280×720,704×480, 640×480, 352×240)
Area-of-interest	Supports three streams and sets four fixed areas respectively
Picture in picture	Supports overlay display of picture-in-picture
Video coding	H.265/H.264/MJPEG
H.265 picture quality	Main Profile
H.264 picture quality	BaseLine Profile / Main Profile / High Profile
Video compression	32 Kbps~16Mbps
Audio coding	G.711a/G.711u/G.722.1/G.726/MP2L2/AAC/PCM
Audio bit rate	64Kbps(G.711)/16Kbps(G.722.1)/16Kbps(G.726)/32-192Kbps(MP2L2)/ 16-64Kbps(AAC)
Network	
Memory function	Supports Micro SD/SDHC /SDXC card (256G) for offline local storage and NAS (NFS, SMB/CIFS supported)

Support agreement	TCP/IP,ICMP,HTTP,HTTPS,FTP,DHCP,DNS,RTP,RTSP,RTCP,NTP,SMTP,SNMP,IPv6
Interface protocol	ONVIF (PROFILE S, PROFILE G), GB28181-2016, mainstream manufacturers protocol
Smart Function	
General events	Mobile detection, video blocking, disk full, illegal access
Smart intelligence	Area intrusion, boundary detection, leaving the area, wandering detection, personnel gathering, rapid movement, item left detection, audio anomaly
Smart detection	Humanoid detection, non-motor vehicle detection, motor vehicle detection, boat detection, flying bird detection
General	
Working temperature and humidity	-40℃~65℃, humidity less than 90% (no condensation)
Voltage	DC24V±20%
Power	Configuration dependent
Power protection	TVS 8000V lightning protection, surge protection, anti-sudden wave, in line with GB/T17626.5 level 4 standard
Case protection	IP66
Size(WxHxD)	333mm x 339mm x 252.8mm
Weight	Configuration dependent, ≤12.5 KG
Ordering Information[2]	
Model	Description
WDM-M5800GXXX	Thermal:50mm; Visible:6.6~264mm, 1/1.8”
WDM-M5800GXXX	Thermal:75mm; Visible:7~322mm, 1/2.8”
WDM-M5800GXXX	Thermal:100mm; Visible:7~322mm, 1/2.8”
WDM-M5800GXXX	Thermal:25-75mm; Visible:7~322mm, 1/2.8”
WDM-M5800GXXX	Thermal:15-100mm; Visible:10~550mm,1/1.25”
Optional Configurations	Wide angle camera; Rangefinder; Gyroscope; GPS;Digital compass;etc.

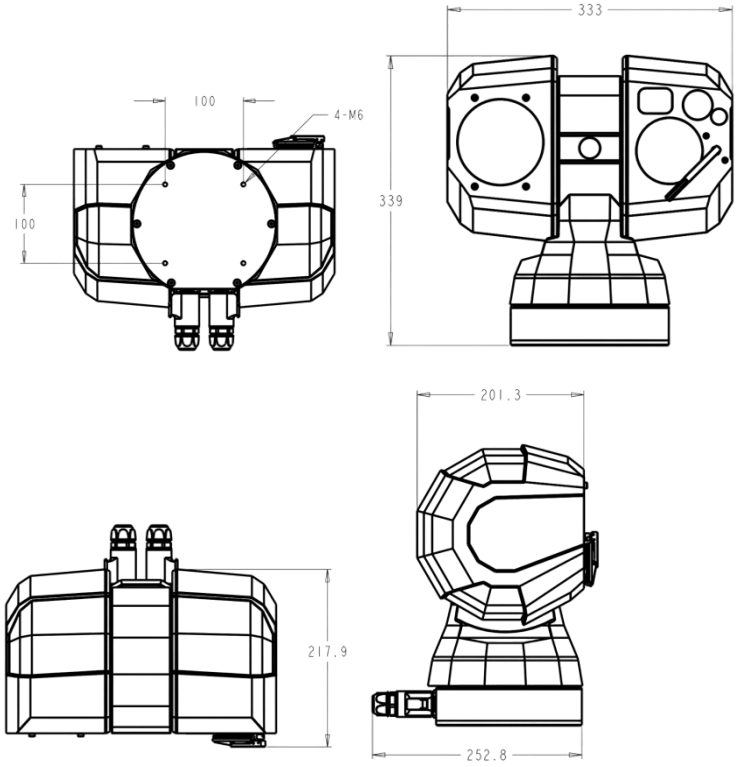
DRI[3]

Lens	Vehicle (4mx1.4m)			Human (1.8mx0.5m)		
	Detection	Recognition	Identification	Detection	Recognition	Identification
50mm	6500m	1700m	850m	2600m	660m	330m
75mm	10200m	2500m	1280m	3900m	980m	490m
100mm	13600m	3400m	1700m	5200m	1300m	650m

[1]At largest aperture of designated camera
[2] Options such as wide-angle camera, laser rangefinder, gyroscope, GPS, digital compass, etc., are configured separately, please consult specialist for detailed information. Further models can be configured, please consult specialists for detailed information.
[3]This table is only for reference and the performance may vary according to different environment.The optimal human detection, recognition, and identification distances are calculated according to Johnson's Criteria.
Detection Range: In order to distinguish an object from the background, the object must be covered by 1.5 or more pixels.

Recognition Range: In order to classify the object (animals, human, vehicle etc.), the object must be covered by 6 or more pixels.
Identification Range: In order to identify the object and describe it in details, the object must be covered by 12 or more pixels.

Dimensions



Specifications in this document is subject to modifications without prior notification. Product pictures are for reference only, the actual product might differ