



Matrix project series IP Cameras are built using superior components and higher MTF lens to offer unmatched image quality especially during the low light conditions. Powered by True WDR algorithm, these cameras offer consistent image quality even in highly varying lighting conditions. Built in intelligent analytics including Intrusion Detection, Trip Wire, etc. ensure real-time security. Moreover, Automatic Motion based Frame Rate Reduction save bandwidth and storage up to 50%.





TECHNICAL SPECIFICATIONS		
CAMERA		
Image Sensor	1/2.8'' Progressive Scan CMOS	
Resolution	1920×1080 (2MP)	
Min. Illumination	0.005Lux (F1.6, AGC ON) for Color, 0Lux with IR, 0.001Lux (F1.6, AGC ON) for B/W	
White Balance	Auto/Manual/ATW (Auto Tracking White Balance)/Indoor/Outdoor/Daylight Lamp/Sodium	
Winto Dalanoo	Lamp/ Fluorescent Lamp	
AGC	Auto/Manual	
S / N Ratio	$\geq$ 50Db	
Digital Noise	3D DNR	
Reduction		
Wide Dynamic	120db WDR	
Range		
Shutter Speed	1 ~ 1/30,000s	
Day & Night	IR Cut Filter	
Zoom	32X Optical, 16X Digital	
Back Light	Supported	
Compensation/	o appointed	
High Light		
Compensation		
Defog	Supported	
Privacy Masking	24 Privacy Masks Programmable	
Focus Mode	Auto/Semi-Automatic/Manual	
Audio	G.711ulaw/G.711alaw/G.726/MP2L2/G.722/PCM	
Compression		
Focal Length	4.8 ~ 153mm, 32x optical zoom	
Zoom Speed	Approx. 5.6s (Optical, Wide-Tele)	
Field of View	Horizontal field of view: 55.6° to 2.04° (Wide-Tele)	
	Vertical field of view: 32.4° to 1.14° (Wide-Tele)	
	Diagonal field of view: 63° to 2.34° (Wide-Tele)	
Min. Working	$10 \sim 1500$ mm (Wide-Tele)	
Distance		
Aperture Range	F1.2 ~ F4.4	
Pan/Tilt Range	Pan: 360° endless; Tilt: -15° $\sim$ 90° (Auto Flip)	
Pan		
Pan/Tilt Speed	Pan Manual Speed: $0.1^{\circ} \sim 160^{\circ}$ /s, Pan Preset Speed: 240°/s	
	Tilt Manual Speed: $0.1^{\circ} \sim 120^{\circ}$ /s, Tilt Preset Speed: $200^{\circ}$ /s	
Pre-set Position	300	
Proportional Zoom	Supported	
IR Distance	Up to 150m	
Smart IR	Supported	



Automatically Adjusted, Depending on the Zoom Ratio		
8 patrols, up to 32 presets for each patrol		
4 pattern scans, record time over 10 minutes for each scan		
Supported		
Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama		
Scan		
Supported		
Supported		
Supported		
Preset/Pattern Scan/Patrol Scan/Auto Scan/Tilt Scan/Random Scan/Frame Scan/Panorama		
Scan/Dome Reboot/Dome Adjust/Aux Output		
AUDIO AND ALARM INTERFACE		
2-ch alarm input and 1-ch alarm output		
1-ch audio input and 1-ch audio output		
Alarm actions, such as Notify Surveillance Center, Upload to FTP, Send Email, Trigger		
Recording, Recording Linkage, and Alarm Input, etc.		
NETWORK		
1 RJ45 10 M/100 M Ethernet, Hi-PoE		
1920×1080 (2MP)		
50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720)		
50fps (1280 $\times$ 960, 1280 $\times$ 720)		
60Hz: 30fps (1920 × 1080, 1280 × 960, 1280 × 720)		
60fps (1280 × 960, 1280 × 720)		
50Hz: 25fps (704 $\times$ 576, 640 $\times$ 480, 352 $\times$ 288)		
60Hz: 30fps (704 $\times$ 480, 640 $\times$ 480, 352 $\times$ 240)		
50Hz: 25fps (1920 × 1080, 1280 × 960, 1280 × 720, 704 × 576, 640 × 480, 352 × 288)		
60Hz: 30fps (1920 $\times$ 1080, 1280 $\times$ 960, 1280 $\times$ 720, 704 $\times$ 480, 640 $\times$ 480, 352 $\times$		
240) HLC/BLC/3D DNR/Defog/EIS/Regional Exposure/Regional Focus		
Main Stream: H.265+/H.265/H.264+/H.264		
Sub-Stream: H.265/H.264/MJPEG		
Third Stream: H.265/H.264/MJPEG		
H.264 with Baseline/Main/High Profile		
32 Kbps to 16384 Kbps		
G.711ulaw/G.711alaw/G.726/MP2L2/G.722/PCM		
G.711alaw/G.711ulaw: 64 Kbps		



	MP212/PCM: 32 Kbps/64 Kbps/128 Kbps
SVC	Supported
Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1X, QoS, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE, Bonjour
Simultaneous Live View	Up to 20 channels
Streams	Three streams
Storage	Built-in memory card slot support Micro SD/SDHC/SDXC, up to 256 GB; NAS (NPS, SMB/ CIPS), ANR
User/Host Level	Up to 32 users, 3 Levels: Administrator, Operator, User
Security Measures User Authentication	User authentication (ID and PW), Host authentication (MAC address); HTTPS encryption; IEEE 802.1x port-based network access control; IP address filtering
Firmware Update	Through Web Browser/Online
Password	Available
Protection	
Available	
	SMART FEATURES
Basic Event	Motion Detection, Alarm Input, Alarm Output, Video Tampering Detection, Exception
Smart Event	Face Detection, Intrusion Detection, Line Crossing Detection, Region Entrance Detection, Region Exiting Detection, Object Removal Detection, Unattended Baggage Detection
Smart Record	ANR (Automatic Network Replenishment), Dual-VCA
ROI	Main stream, sub-stream, and third stream respectively support four fixed areas.
Auto-Tracking	Support
<u> </u>	GENERAL
Application Programming Interface (API)	Open-ended, support ONVIF, ISAPI, and CGI, support HIKVISION SDK and Third-Party Management Platform
Web Browser	IE 8 to 11, Chrome 31.0 to 44.0, Firefox 30.0 to 51.0
Power	24 VAC and Hi-PoE Max.: 40 W (Max. 14 W for IR)
Working	-30 °C ∼ 65°C(-22°F ∼ 149°F)
Temperature	
Humidity	90% or Less
Protection Level	IP66, TVS 4,000V Lightning Protection, Surge Protection and Voltage Transient Protection
Dimensions	Ф220×353.4mm (Ф8.66"×13.91")(Outdoor)
Material	ADC 12, PC, PC+10%GF
Weight	Approx. 4.5kg(9.92lbs)



#### **ABOUT MATRIX**

Established in 1991, Matrix is a leader in security and telecom solutions for modern businesses and enterprises. Matrix, an innovative, technology driven and customer focused organization, is committed to keep pace with the revolutions in security and telecom industries. With more than 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products such as Unified Communications, IP-PBX, Universal Gateways, Convergence, VOIP Gateways, GSM Gateways, IP Video Surveillance, Access Control and Time-Attendance. These solutions are feature-rich, reliable and conform to the international standards. Having global footprints in Europe, North America, South America, Africa and Asia through an extensive network of more than 1000 system integrators, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of customers representing the entire spectrum of industries. Matrix has won many national and international awards for its innovative products.

\* Specifications are subject to change without prior notice.