

CATEGORY	VANDAL DOME CAMERAS																					
	MODEL	IPV4B28X	IPV4E28X	IPV4E28BX	IPV4E40X	IPV4A28IX	IPV4M28X	IPVLP428X	IPV4428X	IPV4U212MX	IPV4B212MX	IPV4213MAIX	IPV5E528X	IPV528X	IPV5M28X	IPV5E212MX	IPV5213MX	IPV54213MX	IPV4KES28X	IPV4K28AIX	IPV4K212MX	
<b>Video</b>																						
Resolution / Description	4MP, White	4MP, White	4MP, Black	4MP, White	4MP, LightHunter, AI, White	4MP, LightHunter, White	4MP, LightHunter, Low Profile, White	4MP, Dual Lens, MultiView, White	4MP, White	4MP, White	4MP, LightHunter, AI, White	5MP, White	5MP, LightHunter, White	5MP, LightHunter, White	5MP, White	5MP, LightHunter, White	4 x 5MP MultiView, LightHunter, AI, White	4K (8MP), White	4K (8MP), AI, White	4K (8MP), LightHunter, White		
FPS @ Max Resolution	30 @ 2560 x 1440	25 @ 2688 x 1520	25 @ 2688 x 1520	25 @ 2688 x 1520	30 @ 2688 x 1520	30 @ 2688 x 1520	30 @ 2688 x 1520	25 @ 2688 x 1520	25 @ 2560 x 1440	25 @ 2688 x 1520	30 @ 2688 x 1520	25 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	25 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160		
Lens	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 4mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.8~12mm	MVF 2.8~12mm	MVF 2.7~13.5mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.7~13.5mm	MVF 2.7~13.5mm	MVF 2.7~13.5mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.8~12mm		
Chipset	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	
Sensor	1/2.9" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/2.7" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/3" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS		
IR LED (Warm Light) Max Range	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	131ft (40M)	98ft (30M)	98ft (30M)	164ft (50M)	131ft (40M)	131ft (40M)	98ft (30M)	98ft (30M)	131ft (40M)	131ft (40M)	131ft (40M)	164ft (50M)	98ft (30M)	98ft (30M)	131ft (40M)		
Min Scene Illum (Lux)	0.01 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.005 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.005 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)	0.003 (Col), 0 (BW, w/ IR)		
WDR	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	
Corridor Mode	n/a	n/a	Yes	Yes	Yes	Yes	Yes	n/a	n/a	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes		
Video Streams	2	2	3	3	3	3	3	3	2	2	3	2	3	3	2	3	2	2	3	3		
<b>General</b>																						
NDA Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Material	Metal	Metal	Plastic	Plastic	Metal	Metal	Plastic	Metal	Metal	Metal	Plastic	Metal	Metal	Plastic	Metal	Plastic	Metal	Plastic	Metal	Metal	Metal	
Onboard Storage	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Alarm I / O	n/a	n/a	n/a	n/a	1 / 1	1 / 1	1 / 1	1 / 1	n/a	n/a	1 / 1	1 / 1	1 / 1	1 / 1	n/a	1 / 1	3 / 2	n/a	1 / 1	1 / 1		
Audio I / O	0 / 0	n/a	n/a	n/a	1 / 1	1 / 1	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	0 / 0	1 / 1	1 / 1	0 / 0	1 / 1	1 / 1		
Operating Temp Range	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)		
Conformity Cert's	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10	IP67, IK10		
Power	12VDC / PoE 4W	12VDC / PoE 4.4W	12VDC / PoE 5.5W	12VDC / PoE 5.5W	12VDC / PoE 4.5W	12VDC / PoE 6.5W	12VDC / PoE 6W	12VDC / PoE 9.1W	12VDC / PoE 8W	12VDC / PoE 7W	12VDC / PoE 4.4W	12VDC / PoE 7W	12VDC / PoE 6.5W	12VDC / PoE 7.5W	12VDC / PoE 7W	12VDC / PoE 48.7W	12VDC / PoE 4.9W	12VDC / PoE 6W	12VDC / PoE 6W	12VDC / PoE 9W		
<b>SMART Detection Features</b>																						
Motion	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Ultra Motion	n/a	Support	Support	Support	Support	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Tampering	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Audio	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Scene Change	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Defocus	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Cross Line	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Enter Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Leave Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Intrusion	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support		
Human Body	n/a	Support	n/a	n/a	n/a	n/a	n/a	n/a	Support	Support	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	n/a		
<b>Deep Learning SMART Features</b>																						
Smart Intrusion	n/a	n/a	n/a	n/a	Support	Support	Support	Support	n/a	n/a	Support	n/a	Support	Support	Support	n/a	Support	Support	n/a	Support		
People Counting	n/a	n/a	n/a	n/a	Support	Support	Support	Support	n/a	n/a	Support	n/a	Support	Support	Support	n/a	Support	Support	n/a	Support		
People Flow Counting	n/a	n/a	n/a	n/a	Support	Support	Support	Support	n/a	n/a	Support	n/a	Support	Support	Support	n/a	Support	Support	n/a	Support		
Crowd Density Monitoring	n/a	n/a	n/a	n/a	Support	Support	Support	Support	n/a	n/a	Support	n/a	Support	Support	Support	n/a	Support	Support	n/a	Support		
Face Capture	n/a	n/a	n/a	n/a	Support	Support	Support	Support	n/a	n/a	Support	n/a	Support	Support	Support	n/a	Support	Support	n/a	Support		
Heat Map	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Auto Tracking	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Panoramic Linkage	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a		
Color Retrieval	n/a	n/a	n/a	n/a	n/a	Support	n/a	Support	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a		

CATEGORY	TURRET CAMERAS																							
	IPT4B28X	IPT4E528X	IPT428AIX	IPT4M28X	IPT4U212MX	IPT4B212MX	IPT4213MAX	IPT4W128X	IPTHT426X	IPTSE528X	IPT5180X	IPT5EC28X	IPT528AIX	IPT5M28X	IPT5213MX	IPT4E528X	IPT4E528BX	IPT4K28AIX	IPT4K28AIBX	IPT4K28TAIX	IPT4K212MX	IPT4K180X	IPT4KI28X	IPT4K180AIX
MODEL																								
<b>Video</b>																								
<b>Resolution</b>	4MP, White	4MP, White	4MP, LightHunter, AI, White	4MP, LightHunter, White	4MP, White	4MP, White	4MP, LightHunter, AI, White	4MP, ColorHunter+ (Wise-ISP), AI, White	4MP, Thermal / Optical, White	5MP, AI, White	5MP, Pano 180°, AI, White	5MP, ColorHunter, AI, White	5MP, LightHunter, White	5MP, LightHunter, White	5MP, LightHunter, White	4K (8MP), AI, White	4K (8MP), AI, Black	4K (8MP), AI, White	4K (8MP), AI, Black	4K (8MP), ColorHunter, AI, White	4K (8MP), LightHunter, AI, White	4MP, Pano 180°, AI, White	4K (8MP), ColorHunter+ (Wise-ISP), AI, White	4K (8MP), Multi-Lens, AI, White
<b>FPS @ Max Resolution</b>	25 @ 2560 x 1440	25 @ 2688 x 1520	30 @ 2688 x 1520	30 @ 2688 x 1520	25 @ 2560 x 1440	25 @ 2688 x 1520	30 @ 2688 x 1520	30 @ 2688 x 1520	25 @ 2688 x 1520	25 @ 2688 x 1520	30 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	25 @ 2880 x 1620	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160	30 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 4096 x 1860
<b>Lens</b>	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.8~12mm	MVF 2.8~12mm	MVF 2.7~13.5mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Pano 1.68mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.7~13.5mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm
<b>Chipset</b>	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar
<b>Sensor</b>	1/2.9" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/2.7" CMOS	1/3" CMOS	1/3" CMOS	1/1.8" CMOS	1/2.8" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.5" CMOS
<b>IR LED (Warm Light) Max Range</b>	98ft (30M)	98ft (30M)	98ft (30M)	131ft (40M)	164ft (50M)	131ft (40M)	131ft (40M)	(Warm Light Only) 98ft (30M)	98ft (30M)	98ft (30M)	66ft (20M)	98ft (30M)	98ft (30M)	131ft (40M)	131ft (40M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)	98ft (30M)
<b>Min Scene Illum (Lux)</b>	0.01 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.0003 (Col)	0.01 (Col)	0.003 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.001 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.002 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.005 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.0025 (Col); 0 (BW, w/ IR)	0.003 (Col); 0 (BW, w/ IR)	0.01 (Col); 0 (BW, w/ IR)	0.0003 (Col)	0.0005 (Col); 0 (BW, w/ IR)
<b>WDR</b>	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	DWDR	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB
<b>Corridor Mode</b>	n/a	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Video Streams</b>	2	2	3	3	2	2	3	2	2	2	3	3	3	3	3	2	2	3	3	3	3	3	2	2
<b>General</b>																								
<b>NDAA Compliant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Material</b>	Metal	Plastic	Metal	Metal	Metal	Metal	Plastic	Metal	Metal	Plastic	Metal	Metal	Metal	Metal	Metal	Plastic	Plastic	Metal	Metal	Metal	Metal	Metal	Metal	Plastic
<b>Onboard Storage</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
<b>Alarm I / O</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1 / 1
<b>Audio I / O</b>	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	0 / 0 B/I Mic	1 / 1 2x8/I Mic; B/I Spkr
<b>Operating Temp Range</b>	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-40°C ~ 70°C (-40°F ~ 158°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)
<b>Conformity Cert's</b>	IP67	IP67	IP67	IP67	IP67	IP67	IP67, IK10	IP67	IP67	IP67	IP67, IK10	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67	IP67, IK10	IP67, IK10	IP67	IP67, IK10
<b>Power</b>	12VDC / PoE 4W	12VDC / PoE 4.4W	12VDC / PoE 4W	12VDC / PoE 6.5W	12VDC / PoE 6W	12VDC / PoE 7.5W	12VDC / PoE 7W	12VDC / PoE 2.8W	12VDC / PoE 12W	12VDC / PoE 2.8W	12VDC / PoE 5.5W	12VDC / PoE 7W	12VDC / PoE 9W	12VDC / PoE 6.5W	12VDC / PoE 7W	12VDC / PoE 4.5W	12VDC / PoE 5W	12VDC / PoE 5W	12VDC / PoE 5W	12VDC / PoE 5W	12VDC / PoE 8W	12VDC / PoE 8W	12VDC / PoE 5.5W	12VDC / PoE 3.9W
<b>SMART Detection Features</b>																								
<b>Motion</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support
<b>Ultra Motion</b>	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support
<b>Tampering</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support
<b>Audio</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support
<b>Scene Change</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Defocus</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a
<b>Cross Line</b>	n/a	Support	n/a	n/a	n/a	Support	n/a	Support	Support	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	n/a	n/a	n/a	n/a	Support	n/a	Support
<b>Enter Area</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support
<b>Leave Area</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support
<b>Intrusion</b>	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	n/a	n/a	n/a	n/a	Support	n/a	Support
<b>Deep Learning SMART Features</b>																								
<b>Smart Intrusion</b>	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	Support	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	n/a	Support
<b>People Counting</b>	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	n/a	Support
<b>People Flow Counting</b>	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	n/a	Support
<b>Crowd Density Monitoring</b>	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	n/a	Support
<b>Face Capture</b>	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	Support	Support	Support	n/a	n/a	Support	Support	Support	Support	Support	n/a	Support
<b>Color Retrieval</b>	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support	Support	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	Support

CATEGORY	IP BULLET CAMERAS																		
MODEL	IPLPB2447MX	IPB4B28X	IPB4E528X	IPB428AIX	IPB4U212MX	IPB4B212MX	IPB4213MAIX	IPB46143MX	IPTHB480X	IPB528X	IPB5M28X	IPB5213MX	IPB5180X	IPB4KES28X	IPB4K28AIX	IPB4K212MX	IPB4K180X	IPBP16180	
<b>Video</b>																			
Resolution	2MP LPR, White	4MP, White	4MP, White	4MP LightHunter, Ai, White	4MP, White	4MP, White	4MP, LightHunter, Ai, White	4MP Long Range, LightHunter, White	4MP, Thermal / Optical, White	5MP, LightHunter, White	5MP, LightHunter, White	5MP, LightHunter, White	5MP, Pano 180°, Ai, White	4K (8MP), White	4K (8MP), Ai, White	4K (8MP), White	4K (8MP), Pano 180°, Ai, White	16MP, Multi-Sensor, LightHunter, White	
FPS @ Max Resolution	60 @ 1920 x 1080	25 @ 2560 x 1440	25 @ 2655 x 1520	30 @ 2655 x 1520	25 @ 2560 x 1440	25 @ 2655 x 1520	30 @ 2655 x 1520	30 @ 2655 x 1520	30 @ 2655 x 1520	25 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	30 @ 2880 x 1620	20 @ 3840 x 2160	20 @ 3840 x 2160	20 @ 3840 x 2160	30 @ 5120 x 1440	30 @ 4800 x 2688	
Lens	MVF 4.7 ~ 47mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.8~12mm	MVF 2.8~12mm	MVF 2.7~13.5mm	MVF 6.5~143mm	Fixed 8mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.7~13.5mm	Pano 1.68mm	Fixed 2.8mm	Fixed 2.8mm	MVF 2.8~12mm	Pano 1.68mm	4x Fixed 2.8mm	
Chipset	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	Mstar	HiSilicon
Sensor	1/2.8" CMOS	1/2.9" CMOS	1/3" CMOS	1/3" CMOS	1/2.7" CMOS	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.8" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS	4x 1/1.8" CMOS
IR LED (Warm Light) Max	164ft (50M)	98ft (30M)	164ft (50M)	131ft (40M)	164ft (50M)	164ft (50M)	164ft (50M)	492ft (150M)	164ft (50M)	131ft (40M)	262ft (80M)	164ft (50M)	66ft (20M)	164ft (50M)	98ft (30M)	164ft (50M)	66ft (20M)	164ft (50M)	
Min Scene Illum (Lux)	0.001 (Col); 0 (BW, w/IR)	0.01 (Col); 0 (BW, w/IR)	0.003 (Col); 0 (BW, w/IR)	0.01 (Col); 0 (BW, w/IR)	0.005 (Col); 0 (BW, w/IR)	0.003 (Col); 0 (BW, w/IR)	0.002 (Col); 0 (BW, w/IR)	0.0005 (Col); 0 (BW, w/IR)	0.003 (Col); 0 (BW, w/IR)	0.003 (Col); 0 (BW, w/IR)	0.002 (Col); 0 (BW, w/IR)	0.002 (Col); 0 (BW, w/IR)	0.01 (Col); 0 (BW, w/IR)	0.005 (Col); 0 (BW, w/IR)	0.01 (Col); 0 (BW, w/IR)	0.003 (Col); 0 (BW, w/IR)	0.01 (Col); 0 (BW, w/IR)	0.001 (Col); 0 (BW, w/IR)	
WDR	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	120dB	Digital	
Corridor Mode	n/a	n/a	Yes	Yes	n/a	Yes	Yes	Yes	Yes	Yes	Yes	Yes	n/a	n/a	Yes	Yes	n/a	n/a	
Video Streams	3	2	2	3	2	2	3	3	3	3	3	3	3	2	3	3	3	3	
<b>General</b>																			
NDA Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	
Material	Metal	Plastic	Plastic	Plastic	Metal	Plastic	Metal	Metal	Metal	Plastic	Metal	Metal	Metal	Metal	Plastic	Metal	Metal	Metal	
Onboard Storage	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Alarm I / O	2 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	2 / 1	2 / 2	0 / 0	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	2 / 1	
Audio I / O	1 / 1	0 / 0	0 / 0	0 / 0	0 / 0	0 / 0	1 / 1	1 / 1	1 / 1	0 / 0	1 / 1	1 / 1	0 / 0	0 / 0	0 / 0	1 / 1	0 / 0	1 / 1	
Operating Temp Range	-40°C ~ 60°C (-40°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-40°C ~ 60°C (-40°F ~ 158°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-40°C ~ 70°C (-40°F ~ 158°F)	
Conformity Cert's	IP67, IK10	IP67	IP67	IP67	IP67	IP67	IP67, IK10	IP67	IP67	IP67	IP67	IP67, IK10	IP67	IP67	IP67	IP67	IP67	IP67, IK10	
Power	12VDC / PoE 20W	12VDC / PoE 5.5W	12VDC / PoE 6W	12VDC / PoE 4W	12VDC / PoE 7.5W	12VDC / PoE 9.6W	12VDC / PoE 8.5W	12VDC / PoE 21W	12VDC / PoE 12W	12VDC / PoE 4.4W	12VDC / PoE 10W	12VDC / PoE 8W	12VDC / PoE 5.5W	12VDC / PoE 6.9W	12VDC / PoE 10.5W	12VDC / PoE 10.5W	12VDC / PoE 5.5W	24VAC/24VDC (Injector) 27W	
<b>SMART Detection Features</b>																			
Motion	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
Ultra Motion	n/a	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	Support	Support	Support	Support	Support	Support	Support	Support	n/a	
Tampering	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
Audio	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
Scene Change	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Defocus	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Cross Line	n/a	n/a	Support	n/a	n/a	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	
Enter Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Leave Area	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
Intrusion	n/a	n/a	Support	n/a	Support	Support	n/a	n/a	Support	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	
Human Body	n/a	n/a	n/a	n/a	Support	Support	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Deep Learning SMART Features</b>																			
Smart Intrusion	n/a	n/a	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	Support	n/a	Support	Support	Support	n/a	
People Counting	n/a	n/a	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	Support	n/a	Support	Support	Support	n/a	
People Flow Counting	n/a	n/a	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	Support	n/a	Support	Support	Support	n/a	
Crowd Density Monitoring	n/a	n/a	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	Support	n/a	Support	Support	Support	n/a	
Face Capture	n/a	n/a	n/a	Support	n/a	n/a	Support	Support	n/a	Support	Support	Support	Support	n/a	Support	Support	Support	n/a	
Color Retrieval	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	Support	n/a	n/a	n/a	n/a	n/a	Support	n/a	

# Quick Reference Guide

CATEGORY	PTZ					FISHEYE		
	IPCS2428X	IPCS416X	IPCS425X	IPCSDC5X	IPCS4K25X	MODEL	IPFE5360X	IPFE12360X
MODEL								
<b>Video</b>								
Resolution	2MP, Dual Lens, 4x, White	4MP, LightHunter, 16x, White	4MP, LightHunter, 25x, White	5MP, Active Deterrence, 5x, White	4K (8MP), LightHunter, 25x, White	Resolution	5MP, Panoramic 360° Fisheye, White	12MP, Panoramic 360° Fisheye, White
FPS @ Max Resolution	25 @ 1920 x 1080	30 @ 2688 x 1520	30 @ 2688 x 1520	30 @ 2880 x 1620	30 @ 3840 x 2160	FPS @ Max Resolution	30 @ 2592 x 1944	20 @ 4000 x 3000
Lens	Fixed 2.8mm & MVF 4x, 2.8~12mm	MVF 16x 5.5~88mm	MVF 25x 4.8~120mm	MVF 4x 2.8~12mm	MVF 25x 6~150mm	Lens	Fixed 1.4mm Pano	Fixed 1.8mm Pano
Chipset	Mistar	Mistar	Mistar	Mistar	Mistar	Chipset	Mistar	Mistar
Sensor	1/2.8" CMOS	1/2.9" CMOS	1/2.8" CMOS	1/2.7" CMOS	1/1.8" CMOS	Sensor	1/2.8" CMOS	1/1.7" CMOS
IR LED (Warm Light) Max	164ft (50M)	328ft (100M)	328ft (100M)	164ft (50M)	656ft (200M)	IR LED Max Range	33ft (10M)	49ft (15M)
Min Scene Illum (Lux)	0.002 (Coll); 0 (BW, w/ IR)	0.005 (Coll); 0 (BW, w/ IR)	0.003 (Coll); 0 (BW, w/ IR)	0.003 (Coll); 0 (BW, w/ IR)	0.003 (Coll); 0 (BW, w/ IR)	Min Scene Illum (Lux)	0.01 (Coll); 0 (BW, w/ IR)	0.003 (Coll); 0 (BW, w/ IR)
WDR	120dB	120dB	120dB	120dB	Digital	WDR	120dB	Digital
Corridor Mode	Yes	n/a	n/a	n/a	n/a	Corridor Mode	n/a	n/a
Video Streams	2	2	3	3	3	Video Streams	3	3
<b>General</b>								
NDAA Compliant	Yes	Yes	Yes	Yes	Yes	NDAA Compliant	Yes	Yes
Material	Metal	Metal	Metal	Metal	Metal	Material	Metal	Metal
Onboard Storage	n/a	Yes	Yes	Yes	Yes	Onboard Storage	Yes	Yes
Alarm I / O	n/a	2 / 1	2 / 1	1 / 1	2 / 1	Alarm I / O	1 / 1	2 / 1
Audio I / O	B/I Spkr & 2 x Mic	1 / 1	1 / 1	B/I Mic & Spkr	1 / 1	Audio I / O	1 / 1 B/I Mic x 2	B/I Mic x 2 & Spkr
Operating Temp Range	-20°C ~ 60°C (-4°F ~ 140°F)	-40°C ~ 70°C (-40°F ~ 158°F)	-40°C ~ 70°C (-40°F ~ 158°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-40°C ~ 65°C (-40°F ~ 149°F)	Operating Temp Range	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)
Conformity Cert's	IP66	IP66, IK10	IP67, IK10	IP66	IP66	Conformity Cert's	IP67, IK10	IP67, IK10
Power	12VDC / PoE 16W	12VDC / PoE 21W	12VDC / PoE 21W	12VDC / PoE 18W	24VAC/24VDC/PoE (Injector Req'd) 60W	Power	12VDC / PoE 8.5W	12VDC / PoE 12W
<b>SMART Detection Features</b>								
Motion	Support	Support	Support	Support	Support	Motion	Support	Support
Ultra Motion	n/a	n/a	n/a	n/a	n/a	Ultra Motion	n/a	n/a
Tampering	n/a	Support	Support	Support	Support	Tampering	Support	Support
Audio	Support	Support	Support	Support	Support	Audio	Support	Support
Heat Map	n/a	n/a	n/a	n/a	n/a	Heat Map	Support	n/a
<b>Deep Learning SMART Features</b>								
Smart Intrusion	Support	Support	Support	Support	Support	Smart Intrusion	n/a	Support
People Counting	Support	n/a	Support	Support	Support	People Counting	n/a	n/a
People Flow Counting	Support	n/a	Support	Support	Support	People Flow Counting	n/a	n/a
Crowd Density Monitoring	n/a	n/a	Support	Support	Support	Crowd Density Monitoring	n/a	n/a
Face Capture	n/a	n/a	Support	Support	Support	Face Capture	n/a	n/a
Heat Map	n/a	n/a	n/a	n/a	n/a	Heat Map	n/a	Support
Auto Tracking	n/a	Support	Support	Support	Support	Auto Tracking	n/a	n/a
Panoramic Linkage	Support	n/a	n/a	n/a	n/a	Panoramic Linkage	n/a	n/a

# Quick Reference Guide

CATEGORY	NETWORK VIDEO RECORDERS (NVR)											
	NR041XP	NR081XP	NR162XPC	NR164X	NR164XPQ	NR324XPC	NR324XPQ	NR648XC	NR6416X	NR12816X	NR25624	
<b>MODEL</b>												
<b>Video &amp; Audio Inputs</b>												
<b>Video Inputs</b>	4	8	16	16	16	32	32	64	64	128	256	
<b>Audio Inputs</b>	1	1	1	1	1	1	1	1	1	1	1	
<b>Video &amp; Audio Outputs</b>												
<b>HDMI / VGA Output</b>	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 3840 x 2160 / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 3840 x 2160 / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI: 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	HDMI 1 / HDMI 2: 3840 x 2160 / 60Hz, 3840 x 2160 / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz HDMI1&2: 4K(3840x2160) @30Hz, 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz VGA1&2: 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz	HDMI1: 8K(7680x4320) @60Hz, HDMI1&2: 4K(3840x2160) @30Hz, 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz VGA1&2: 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz	HDMI1: 8K(7680x4320) @60Hz, HDMI1&2: 4K(3840x2160) @30Hz, 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz VGA1&2: 1920x1080 @60Hz, 1920x1080 @50Hz, 1600x1200 @60Hz, 1280x1024 @60Hz, 1280x720 @60Hz, 1024x768 @60Hz	HDMI1 / HDMI2 (HDMI audio output not supported): 4K (3840 x 2160) / 30Hz, 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz VGA: 1920 x 1080 / 60Hz, 1920 x 1080 / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz
<b>Recording Resolution</b>	4K / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	4K / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	12MP / 4K / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	
<b>Audio Output</b>	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA	2-ch, RCA	2-ch, RCA	2-ch, RCA	1-ch, RCA	
<b>Audio Compression</b>	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	G.711A, G.711U	
<b>Synchronous Playback</b>	4-ch	8-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	
<b>Live View Display (per monitor)</b>	1/4	1/4 / 6 / 8 / 9	1/4 / 6 / 8 / 9 / 16	1/4 / 6 / 8 / 9 / 16	1/4 / 6 / 8 / 9 / 16	1/4 / 6 / 8 / 9 / 16	1/4 / 6 / 8 / 9 / 16 / 25 / 32	1/4 / 6 / 8 / 9 / 16 / 25 / 32	1/4 / 6 / 8 / 9 / 16 / 32 / 64	1/4 / 6 / 8 / 9 / 16 / 32 / 64	1/4 / 6 / 8 / 9 / 16 / 32 / 64	
<b>Total Live Display (combined all monitor outputs)</b>	4	9	32	32	32	64	64	128	64	64	96	
<b>Corridor Mode Screen</b>	3 / 4	3 / 4 / 5 / 7 / 9	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	3 / 4 / 5 / 7 / 9 / 10 / 12 / 16 / 32	
<b>Snapshot</b>												
<b>FTP / Schedule / Event Snapshot</b>	4-ch snapshot, up to D1 resolution	4-ch snapshot, up to D1 resolution	4-ch snapshot, up to D1 resolution	16-ch snapshot, up to 1080P resolution	4-ch snapshot, up to 4K video or 1080P image resolution	4-ch snapshot, up to D1 resolution	4-ch snapshot, up to D1 resolution	16-ch snapshot, up to 1080p resolution	64-ch snapshot, up to 1080P resolution	128-ch snapshot, up to 1080P resolution	128-ch snapshot, up to 4K resolution	
<b>Network</b>												
<b>Incoming Bandwidth</b>	80Mbps	80Mbps	320Mbps	384Mbps	320Mbps	320Mbps	320Mbps	320Mbps; Smart: 160Mbps	384Mbps	640Mbps	768Mbps	
<b>Outgoing Bandwidth</b>	64Mbps	64Mbps	160Mbps	384Mbps	160Mbps	160Mbps	160Mbps	160Mbps	384Mbps	640Mbps	768Mbps	
<b>Remote Users</b>	128	128	128	128	128	128	128	128	128	128	256	
<b>Protocols</b>	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, RTSP, IPV6	P2P, UPnP, NTP, DHCP, PPPoE	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, RTSP, IPV6	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, RTSP, IPV6	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, RTSP, IPV6	TCP/IP, P2P, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, NFS, RTSP, 802.1x, IPV6	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, NFS, RTSP, 802.1x, IPV6	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SNMP, SMTP, NFS, RTSP, 802.1x, IPV6	P2P, UPnP, NTP, DHCP, PPPoE	
<b>Supported Browsers</b>	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows
<b>Decoding</b>												
<b>Format</b>	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	Ultra 265 / H.265 / H.264	
<b>Live View / Playback</b>	4K / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	4K / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	12MP / 4K / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	32MP / 16MP / 12MP / 8MP / 6MP / 5MP / 4MP / 3MP / 1080p / 960p / 720p / D1 / 2CIF / CIF	
<b>Capability (fps)</b>	Ultra 265 / H.265: 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	Ultra 265 / H.265: 2 x 16MP @ 30, 2 x 12MP @ 30, 4 x 4K @ 30, 6 x 5MP @ 30, 8 x 4MP @ 30, 10 x 3MP @ 30, 16 x 1080p @ 30 H.264: 2 x 16MP (4800 x 2688) @ 30, 2 x 12MP @ 30, 2 x 4K @ 30, 4 x 5MP @ 30, 6 x 4MP @ 30, 8 x 3MP @ 30, 14 x 1080p @ 30	2 x 32MP @ 30, 4 x 16MP @ 30, 5 x 12MP @ 30, 8 x 4K @ 30, 12 x 5MP @ 30, 16 x 4MP @ 30, 30, 20 x 3MP @ 30, 32 x 1080p @ 30, 54 x 960p @ 30, 64 x 720p @ 30	2 x 32MP @ 30, 4 x 16MP @ 30, 5 x 12MP @ 30, 8 x 4K @ 30, 12 x 5MP @ 30, 16 x 4MP @ 30, 30, 20 x 3MP @ 30, 32 x 1080p @ 30, 54 x 960p @ 30, 64 x 720p @ 30	2 x 32MP @ 30, 4 x 16MP @ 30, 5 x 12MP @ 30, 8 x 4K @ 30, 12 x 5MP @ 30, 16 x 4MP @ 30, 30, 20 x 3MP @ 30, 32 x 1080p @ 30, 54 x 960p @ 30, 64 x 720p @ 30	5 x 4K @ 30, 20 x 1080P @ 30, 24 x 1080P @ 30, 25, 45 x 720P @ 30, 54 x 720P @ 25, 96 x D1
<b>Hard Disk Drive</b>												
<b>SATA</b>	1 Interface	1 Interface	2 Interfaces	4 Interfaces	4 Interfaces	4 Interfaces	4 Interfaces	8 Interfaces	16 Interfaces	16 Interfaces	24 Interfaces	
<b>Maximum Capacity</b>	Up to 8TB	Up to 8TB	Up to 10TB for each	Up to 10TB for each	Up to 12TB for each	Up to 12TB for each	Up to 12TB for each	Up to 16TB for each	Up to 16TB for each	Up to 16TB for each	Up to 10TB for each	
<b>Disk Array</b>	n/a	n/a	n/a	RAID 1, 5	RAID 1, 5	n/a	support	n/a	RAID 0, 1, 5, 6, 10, 50, 60	RAID 0, 1, 5, 6, 10, 50, 60	RAID 0, 1, 5, 6, 10, 50, 60	
<b>Extension Board</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	4	
<b>eSATA / Mini-SAS</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	1 eSATA Interface / 0	1 eSATA Interface / 0	1 eSATA Interface / 2 x Mini-SAS ports	
<b>System Alarm</b>												
<b>General</b>	Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Defocus Detection, Scene Change Detection, Object Left Behind, Object Removed, Auto Tracking, Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	Motion, Tampering, Human Body Detection, Video Loss, Alarm Input, Audio Detection	

CATEGORY	NETWORK VIDEO RECORDERS (NVR)											
	MODEL	NR041XP	NR081XP	NR162XP	NR164X	NR164XPQ	NR324XP	NR324XPQ	NR648XC	NR6416X	NR12816X	NR25624
<b>Alert</b>	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal
<b>External Interfaces</b>												
<b>Network</b>	1 x RJ-45 10M / 100M self-adaptive Ethernet Interface	1 x RJ-45 10M / 100M self-adaptive Ethernet Interface	1 x RJ45 10M/100M/1000M self-adaptive Ethernet Interface	2 x RJ-45 10M / 100M / 1000 self-adaptive Ethernet Interface	1 x RJ45 10M/100M/1000M self-adaptive Ethernet Interface	1 x RJ-45 10M / 100M / 1000 self-adaptive Ethernet Interface	1 x RJ-45 10M / 100M / 1000 self-adaptive Ethernet Interface	2 x RJ-45 10M / 100M / 1000 self-adaptive Ethernet Interface	2 RJ45 10M/100M/1000M self-adaptive Ethernet Interface	2 RJ45 10M/100M/1000M self-adaptive Ethernet Interface	4 x RJ-45 10M / 100M / 1000 self-adaptive Ethernet Interface	
<b>USB</b>	Rear panel: 1 x USB2.0, 1 x USB3.0	Rear panel: 1 x USB2.0, 1 x USB3.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 1 x USB2.0 Rear panel: 1 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 2 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 2 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 2 x USB3.0	Front panel: 2 x USB2.0 Rear panel: 2 x USB3.0	
<b>RS232</b>	n/a	n/a	n/a	1	n/a	n/a	n/a	1	1	1	1	
<b>RS485</b>	n/a	n/a	1	1	1	1	1	1	1	1	1	
<b>Alarm In</b>	n/a	n/a	8-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	16-ch	24-ch	
<b>Alarm Out</b>	n/a	n/a	2-ch	4-ch	4-ch	4-ch	4-ch	4-ch	4-ch	4-ch	8-ch	
<b>Decoding Card Slots (optional)</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	2 Slots	2 Slots	n/a	
<b>Power Output</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	12V	12V	n/a	
<b>PoE</b>												
<b>Interface</b>	4 x RJ-45 10M/100M self-adaptive Ethernet Interface	8 x RJ-45 10M/100M self-adaptive Ethernet Interface	16 x RJ-45 10M/100M self-adaptive Ethernet Interface	n/a	16 x RJ-45 10M/100M self-adaptive Ethernet Interface	16 x RJ-45 10M/100M self-adaptive Ethernet Interface	16 x RJ-45 10M/100M self-adaptive Ethernet Interface	n/a	n/a	n/a	n/a	
<b>Maximum Power</b>	Max 30W for single port Max 50W in total	Max 30W for single port Max 75W in total	Max 30W for single port Max 240W in total	n/a	Max 30W for single port Max 150W in total	Max 30W for single port Max 150W in total	Max 30W for single port Max 150W in total	n/a	n/a	n/a	n/a	
<b>Supported Standard</b>	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	n/a	IEEE 802.3af/at	IEEE 802.3af/at	IEEE 802.3af/at	n/a	n/a	n/a	n/a	
<b>General</b>												
<b>NDAA Compliant</b>	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
<b>Power Supply</b>	48V DC / 1.35A Power Consumption: ≤ 10W (without HDD)	53V DC / 1.8A Power Consumption: ≤ 10W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 20W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 25W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 12W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 20W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 12W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 50W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 50W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 50W (without HDD)	100 ~ 240V AC Power Consumption: ≤ 70W (without HDD)	
<b>Working Environment</b>	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +50°C (+14°F ~ +122°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +50°C (+14°F ~ +122°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +50°C (+14°F ~ +122°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C (+14°F ~ +131°F) Humidity ≤ 90% RH (non-condensing)	
<b>Dimensions</b>	205mm × 212mm × 46mm (8.1" × 8.3" × 1.8")	205mm × 212mm × 46mm (8.1" × 8.3" × 1.8")	380mm × 322mm × 53mm (15.0" × 12.7" × 2.1")	442mm × 426mm × 89mm (17.4" × 16.8" × 3.5")	400mm × 368mm × 74mm (15.0" × 14.5" × 2.9")	400mm × 368mm × 74mm (15.0" × 14.5" × 2.9")	400mm × 368mm × 74mm (15.0" × 14.5" × 2.9")	442mm × 448mm × 93mm (17.4" × 17.6" × 3.7")	482mm × 533mm × 131mm (19.0" × 21.0" × 5.1")	482mm × 533mm × 131mm (19.0" × 21.0" × 5.1")	533mm × 484.6mm × 175.5mm (21.0" × 19.1" × 6.9")	
<b>Weight</b>	≤ 0.98kg (2.16lb)	≤ 0.98kg (2.16lb)	≤ 2.6kg (5.73lb)	≤ 5.7kg (12.57lb)	≤ 4kg (8.8lb)	≤ 4kg (8.8lb)	≤ 4kg (8.8lb)	≤ 6kg (13.23lb)	≤ 6.5 kg (14.3 lb)	≤ 6.5 kg (14.3 lb)	≤ 12.5 kg (27.56 lb)	
<b>SMART Features</b>												
<b>Ultra Motion Detection</b>	IPC:4	IPC:8	IPC:16	IPC:16	IPC:16 ; NVR:8	IPC:32	IPC:32 ; NVR:8	IPC:64	IPC:64	IPC:128	IPC:64	
<b>Smart Intrusion Prevention</b>	IPC:4	IPC:8	IPC:16	IPC:16	IPC:16 ; NVR:4	IPC:32	IPC:32 ; NVR:4	IPC:64	IPC:64	IPC:128	IPC:64	
<b>Face Detection/Capture</b>	IPC:4	IPC:8	IPC:16	IPC:16	IPC:16 ; NVR:4	IPC:32	IPC:32 ; NVR:4	IPC:64	IPC:64	IPC:128	IPC:64	
<b>Face Recognition</b>	N/A	N/A	IPC:16	IPC:16	IPC:16 ; NVR:8	IPC:32	IPC:32 ; NVR:8	IPC:64	IPC:64	IPC:128	IPC:64	
<b>Plate Recognition</b>	N/A	N/A	IPC:16	IPC:16	IPC:16	IPC:32	IPC:32	IPC:64	IPC:64	IPC:128	IPC:64	
<b>DeWarping by NVR</b>	N/A	N/A	1x9MP	2x5MP or 1x4K	1x9MP	1x9MP	1x9MP	N/A	1x12MP	1x12MP	N/A	
<b>Human Body Detection</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>VCA Playback/Backup</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Face Search</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>IR LED (Warm Light) Max Range</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>People Counting (Regular)</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>People Flow Counting (Deep Learning)</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Crowd Density Monitoring (Deep Learning)</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Intelligent Mark</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Scene Change Detection</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Defocus Detection</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Auto Tracking</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Vehicle Recognition by Camera</b>	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	
<b>Heat Map</b>	n/a	n/a	Support	n/a	Support	Support	Support	Support	Support	Support	n/a	
<b>Object Left Behind</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Object Removed</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Dual-lens Cameras</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Box-Dome Linkage</b>	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	Support	
<b>Point of Sale (POS)</b>	4	8	16	16	16	16	32	16	64	128	16	
<b>Thermal Imaging Cameras (Fire Detection, Smoking Detection, Temperature Measurement, Smoking and Fire Detection)</b>	n/a	n/a	n/a	Support	Support	Support	n/a	Support	n/a	Support	Support	
<b>Color Attributes Search by NVR</b>	n/a	n/a	Support	Support	Support	Support	Support	Support	Support	Support	Support	

# Quick Reference Guide

CATEGORY	AHD TURRET CAMERAS					
MODEL	UHDT228X	UHDT2EC28X	UHDT2C28X	UHDT528X		
<b>Video</b>						
<b>Resolution</b>	2MP 1920 x 1080	2MP 1920 x 1080	2MP 1920 x 1080	5MP 2880 x 1620		
<b>Protocol</b>	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS		
<b>Frame Rates</b>	TVI / AHD / CVI: 1080P @ 30fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI / AHD / CVI: 1080P @ 30fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI / AHD / CVI: 1080P @ 25fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI: 5MP @ 20fps, 5MP @ 12.5fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps AHD: 5MP @ 20fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVI: 5MP @ 25fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVBS: NTSC, PAL		
<b>Lens</b>	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm		
<b>Chipset</b>	Fullhan	Fullhan	Fullhan	Fullhan		
<b>Sensor</b>	1/3" CMOS	1/3" CMOS	1/2.9" CMOS	1/2.7" CMOS		
<b>IR LED Max Range</b>	65ft (20M)	n/a	n/a	65ft (20M)		
<b>White Light Illuminators Range</b>	n/a	One; 65ft (20M)	Two; 130ft (40M)	n/a		
<b>Min Scene Illum (Lux)</b>	0.02 (Col); 0 (BW, w/ IR)	0.02 (Col); 0 (BW, w/ white light on)	0.005 (Col); 0 (BW, w/ white light on)	0.02 (Col); 0 (BW, w/ IR)		
<b>WDR</b>	Digital	Digital	Digital	Digital		
<b>General</b>						
<b>NDAA Compliant</b>	Yes	Yes	Yes	Yes		
<b>Material</b>	Plastic	Plastic	Metal	Plastic		
<b>Power Interface</b>	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel		
<b>Video Output</b>	BNC	BNC	BNC	BNC		
<b>Alarm I / O</b>	n/a	n/a	n/a	n/a		
<b>Audio I / O</b>	n/a	n/a	0 / 0 B/I Mic	n/a		
<b>Operating Temp Range</b>	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)		
<b>Conformity Cert's</b>	IP67	IP67	IP67	IP67		
<b>Power</b>	12VDC 2.88W	12VDC 2.4W	2VDC 3.12W	12VDC 3.6W		
CATEGORY	UHDB228X	UHDB2EC28X	UHDB2C28X	UHDB528X	UHDB5EC28X	UHDB5C28X
<b>MODEL</b>						
<b>Video</b>						
<b>Resolution</b>	2MP 1920 x 1080	2MP 1920 x 1080	2MP 1920 x 1080	5MP 2880 x 1620	5MP 2880 x 1620	5MP 2880 x 1620
<b>Protocol</b>	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS	TVI / AHD / CVI / CVBS
<b>Frame Rates</b>	TVI / AHD / CVI: 1080P @ 30fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI / AHD / CVI: 1080P @ 30fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI / AHD / CVI: 1080P @ 25fps, 1080P @ 25fps, 720P @ 30fps, 720P @ 25fps CVBS: NTSC, PAL	TVI: 5MP @ 20fps, 5MP @ 12.5fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps AHD: 5MP @ 20fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVI: 5MP @ 25fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVBS: NTSC, PAL	TVI: 5MP @ 20fps, 5MP @ 12.5fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps AHD: 5MP @ 20fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVI: 5MP @ 25fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVBS: NTSC, PAL	TVI: 5MP @ 20fps, 5MP @ 12.5fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps AHD: 5MP @ 20fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVI: 5MP @ 25fps, 4MP @ 30fps, 4MP @ 25fps, 1080P @ 30fps, 1080P @ 25fps CVBS: NTSC, PAL
<b>Lens</b>	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm	Fixed 2.8mm
<b>Chipset</b>	Fullhan	Fullhan	Fullhan	Fullhan	Fullhan	Fullhan
<b>Sensor</b>	1/3" CMOS	1/3" CMOS	1/2.9" CMOS	1/2.7" CMOS	1/2.7" CMOS	1/2.7" CMOS
<b>IR LED Max Range</b>	65ft (20M)	n/a	n/a	65ft (20M)	n/a	n/a
<b>White Light Illuminators Range</b>	n/a	One; 65ft (20M)	Two; 130ft (40M)	n/a	One; 65ft (20M)	Two; 130ft (40M)
<b>Min Scene Illum (Lux)</b>	0.02 (Col); 0 (BW, w/ IR)	0.02 (Col); 0 (BW, w/ white light on)	0.005 (Col); 0 (BW, w/ white light on)	0.02 (Col); 0 (BW, w/ IR)	0.02 (Col); 0 (BW, w/ white light on)	0.005 (Col); 0 (BW, w/ white light on)
<b>WDR</b>	Digital	Digital	Digital	Digital	Digital	Digital
<b>General</b>						
<b>NDAA Compliant</b>	Yes	Yes	Yes	Yes	Yes	Yes
<b>Material</b>	Plastic	Plastic	Metal	Plastic	Plastic	Metal
<b>Power Interface</b>	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel	5.5mm Barrel
<b>Video Output</b>	BNC	BNC	BNC	BNC	BNC	BNC
<b>Alarm I / O</b>	n/a	n/a	n/a	n/a	n/a	n/a
<b>Audio I / O</b>	n/a	n/a	0 / 0 B/I Mic	n/a	n/a	0 / 0 B/I Mic
<b>Operating Temp Range</b>	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)	-30°C ~ 60°C (-22°F ~ 140°F)
<b>Conformity Cert's</b>	IP67	IP67	IP67	IP67	IP67	IP67
<b>Power</b>	12VDC 2.88W	12VDC 2.44W	12VDC 3.12W	12VDC 3.6W	12VDC 2.4W	12VDC 3.28W

For additional product information, please visit us online at [www.univiewtechnology.com](http://www.univiewtechnology.com) or call 1-888-288-7644

# Quick Reference Guide

CATEGORY	AHD HYBRID VIDEO RECORDERS (HVR)			
MODEL	HNR041X	HNR081X	HNR162X	HNR322X
<b>Video &amp; Audio Inputs</b>				
<b>Analog Video</b>	4-ch, BNC	8-ch, BNC	16-ch, BNC	32-ch, BNC
<b>IP Video</b>	2-ch (only IP up to 6-ch), each channel up to 4MP	4-ch (only IP up to 12-ch), each channel up to 8MP	8-ch (only IP up to 24-ch), each channel up to 8MP	4-ch (only IP up to 36-ch), each channel up to 8MP
<b>Supported Analog Camera Types</b>	AHD Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps TVI Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVI Input: 8MP @ 15fps, 5MP @ 25fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVBS Input	AHD Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps TVI Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVI Input: 8MP @ 15fps, 5MP @ 25fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVBS Input	AHD Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 60fps TVI Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 60fps CVI Input: 8MP @ 15fps, 5MP @ 25fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVBS Input	AHD Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 60fps TVI Input: 8MP @ 15fps, 5MP @ 20fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 60fps CVI Input: 8MP @ 15fps, 5MP @ 25fps, 4MP @ 30fps, 1080p @ 30fps, 720p @ 30fps CVBS Input
<b>Audio</b>	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA
<b>Audio Compression</b>	G.711U	G.711U	G.711U	G.711U
<b>Video &amp; Audio Outputs</b>				
<b>CVBS Output</b>	1-ch, BNC	1-ch, BNC	1-ch, BNC	1-ch, BNC
<b>VGA Output</b>	1920 x 1080p 60Hz, 1920 x 1080p 50Hz, 1600 x 1200 60Hz, 1280 x 1024 60Hz, 1280 x 720 60Hz, 1024 x 768 60Hz	1920 x 1080p 60Hz, 1920 x 1080p 50Hz, 1600 x 1200 60Hz, 1280 x 1024 60Hz, 1280 x 720 60Hz, 1024 x 768 60Hz	1920 x 1080p 60Hz, 1920 x 1080p 50Hz, 1600 x 1200 60Hz, 1280 x 1024 60Hz, 1280 x 720 60Hz, 1024 x 768 60Hz	1920 x 1080p 60Hz, 1920 x 1080p 50Hz, 1600 x 1200 60Hz, 1280 x 1024 60Hz, 1280 x 720 60Hz, 1024 x 768 60Hz
<b>HDMI Output</b>	3840 x 2160 / 30Hz, 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	3840 x 2160 / 30Hz, 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	3840 x 2160 / 30Hz, 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz	3840 x 2160 / 30Hz, 1920 x 1080p / 60Hz, 1920 x 1080p / 50Hz, 1600 x 1200 / 60Hz, 1280 x 1024 / 60Hz, 1280 x 720 / 60Hz, 1024 x 768 / 60Hz
<b>Audio Output</b>	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA
<b>Synchronous Playback</b>	4	8	16	16
<b>Live view display</b>	HDMI / VGA: 1 / 4 / 6 / 8 / 9	HDMI / VGA: 1 / 4 / 6 / 8 / 9 / 16	HDMI / VGA: 1 / 4 / 6 / 8 / 9 / 16 / 25	HDMI / VGA: 1 / 4 / 6 / 8 / 9 / 16 / 25 / 36
<b>Two-way Audio</b>	1-ch, RCA	1-ch, RCA	1-ch, RCA	1-ch, RCA
<b>Snapshot</b>				
<b>FTP / Schedule / Event Snapshot</b>	n/a	n/a	n/a	32-ch snapshot, up to 704 x 576 resolution
<b>Network</b>				
<b>Incoming Bandwidth</b>	40Mbps (Up to 48Mbps after all analog channel conversion)	40Mbps (Up to 56Mbps after all analog channel conversion)	80Mbps (Up to 112Mbps after all analog channel conversion)	80Mbps (Up to 144Mbps after all analog channel conversion)
<b>Outgoing Bandwidth</b>	48Mbps	64Mbps	160Mbps	160Mbps
<b>Remote Users</b>	128	128	128	128
<b>Protocols</b>	TCP/IP, P2P, UPnP, DHCP, HTTP, HTTPS, DNS, DDNS, SMTP	TCP/IP, P2P, UPnP, DHCP, HTTP, HTTPS, DNS, DDNS, SMTP	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP	TCP/IP, P2P, UPnP, NTP, DHCP, PPPoE, HTTP, HTTPS, DNS, DDNS, SMTP
<b>Supported Browsers</b>	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows	IE (IE10/11) for Windows Firefox (version 52.0 and above) for Windows Chrome (version 45 and above) for Windows Edge (version 79 and above) for Windows
<b>Encoding</b>				
<b>Recording Resolution</b>	8MP Lite / 5MP Lite / 4MP Lite / 1080P / 720P / CIF	8MP Lite / 5MP Lite / 4MP Lite / 1080P / 720P / CIF	8MP Lite / 5MP Lite / 4MP Lite / 1080P / 720P / CIF	8MP Lite / 5MP Lite / 4MP Lite / 1080P / 720P / CIF
<b>Recording Frame Rate</b>	Main Stream: 8MP Lite @ 8fps, 5MP Lite @ 12fps, 4MP Lite @ 15fps, 1080p @ 15fps, 720p @ 30fps Sub-Stream: D1 @ 8fps, D1 @ 12fps, D1 @ 15fps, D1 @ 30fps	Main Stream: 8MP Lite @ 8fps, 5MP Lite @ 12fps, 4MP Lite @ 15fps, 1080p @ 15fps, 720p @ 30fps Sub-Stream: D1 @ 8fps, D1 @ 12fps, D1 @ 15fps, D1 @ 30fps	Main Stream: 8MP Lite @ 8fps, 5MP Lite @ 12fps, 4MP Lite @ 15fps, 1080p @ 15fps, 720p @ 30fps Sub-Stream: D1 @ 8fps, D1 @ 12fps, D1 @ 15fps, D1 @ 30fps	Main Stream: 8MP Lite @ 8fps, 5MP Lite @ 12fps, 4MP Lite @ 15fps, 1080p @ 15fps, 720p @ 30fps Sub-Stream: D1 @ 8fps, D1 @ 12fps, D1 @ 15fps, D1 @ 30fps
<b>Audio Sample Rate</b>	8KHz, 16 bit per channel	8KHz, 16 bit per channel	8KHz, 16 bit per channel	8KHz, 16 bit per channel
<b>Audio Bit Rate</b>	64Kbps per channel	64Kbps per channel	64Kbps per channel	64Kbps per channel
<b>Decoding</b>				
<b>Frame Rate Capability</b>	Analog: 4 x 8MP Lite @ 8, 4 x 5MP Lite @ 12, 4 x 4MP Lite @ 15, 4 x 1080P @ 15 IP: 1 x 4MP @ 30, 2 x 1080p @ 30	Analog: 8 x 8MP Lite @ 8, 8 x 5MP Lite @ 12, 8 x 4MP Lite @ 15, 8 x 1080P @ 15 IP: 1 x 8MP @ 30, 2 x 4MP @ 30, 4 x 1080p @ 30	Analog: 16 x 8MP Lite @ 8, 16 x 5MP Lite @ 12, 16 x 4MP Lite @ 15, 16 x 1080P @ 15, 16 x 720P @ 30 IP: 24 x D1 @ 30, 16 x 720P @ 30, 8 x 1080P @ 30	Analog: 16x8MP Lite @ 8, 16x5MP Lite @ 12, 16x4MP Lite @ 15, 16x1080P @ 15, 16x720P @ 30 IP: 16x720P @ 30, 8x1080P @ 30, 4x4MP @ 30, 2x8MP @ 30
<b>Hard Disk Drive</b>				
<b>SATA</b>	1 Interface	1 Interface	2 Interfaces	2 Interfaces
<b>Maximum Capacity</b>	Up to 10TB	Up to 10TB	Up to 10TB each	Up to 10TB each
<b>System Alarm</b>				
<b>General</b>	Motion Detection			
<b>Alert</b>	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal	IP Conflict, Network Disconnected, Disk Offline, Disk Abnormal, Illegal Access, Hard Disk Space Low, Hard Disk Full, Recording / Snapshot Abnormal
<b>External Interfaces</b>				
<b>Network</b>	1 x RJ45 10M/100M self-adaptive Ethernet Interface	1 x RJ45 10M/100M self-adaptive Ethernet Interface	1 x RJ45 10M/100M self-adaptive Ethernet Interface	1 x RJ45 10M/100M self-adaptive Ethernet Interface
<b>USB</b>	Rear panel: 2 x USB2.0	Rear panel: 2 x USB2.0	Rear panel: 1 x USB3.0; Front panel: 1 x USB2.0	Rear panel: 1 x USB3.0; Front panel: 1 x USB2.0
<b>RS232</b>	n/a	n/a	n/a	n/a
<b>RS485</b>	1	1	1	1
<b>Alarm In</b>	4 – Terminal Strip	4 – Terminal Strip	4 – Terminal Strip	4 – Terminal Strip
<b>Alarm Out</b>	1 – Terminal Strip	1 – Terminal Strip	1 – Terminal Strip	1 – Terminal Strip
<b>General</b>				
<b>NDA Compliant</b>	Yes	Yes	Yes	Yes
<b>Power Supply</b>	12V DC; Power Consumption: ≤ 10 W ( without HDD )	12V DC; Power Consumption: ≤ 10 W ( without HDD )	12V DC; Power Consumption: ≤ 12 W ( without HDD )	12V DC; Power Consumption: ≤ 38W ( without HDD )
<b>Working Environment</b>	-10°C ~ +55°C ( +14°F ~ +131°F ), Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C ( +14°F ~ +131°F ), Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C ( +14°F ~ +131°F ), Humidity ≤ 90% RH (non-condensing)	-10°C ~ +55°C ( +14°F ~ +131°F ), Humidity ≤ 90% RH (non-condensing)
<b>Dimensions</b>	260 × 226 × 47mm (10.2 × 8.9 × 1.8")	260 × 226 × 47mm (10.2 × 8.9 × 1.8")	380 × 326 × 53mm (15.0 × 12.8 × 2.1")	380 × 326 × 53mm (15.0 × 12.8 × 2.1")
<b>Weight</b>	1.1Kg (2.42lb)	1.1Kg (2.42lb)	≤ 2.0 Kg (4.4lb)	≤ 2.6Kg (5.72lb)
<b>Certifications</b>	FCC, CE; (UL – Power Supply only)	FCC, CE; (UL – Power Supply only)	FCC, CE; (UL – Power Supply only)	FCC, CE; (UL – Power Supply only)



# Quick Reference Guide

CATEGORY	AHD HYBRID VIDEO RECORDERS (HVR)			
MODEL	HNR041X	HNR081X	HNR162X	HNR322X
<b>SMART Features</b>				
<b>Ultra Motion Detection</b>	Analog camera - Support	Analog camera - Support	Analog camera - Support	Analog camera - Support
<b>Face Detection</b>	IP camera - Support	IP camera - Support	IP camera - Support	IP camera - Support
<b>Intrusion Detection</b>	n/a	n/a	IP camera - Support	n/a
<b>Cross Line Detection</b>	n/a	n/a	IP camera - Support	n/a
<b>Enter Area / Leave Area</b>	n/a	n/a	IP camera - Support	n/a
<b>Defocus Detection</b>	n/a	n/a	IP camera - Support	IP camera - Support
<b>Scene Change Detection</b>	n/a	n/a	IP camera - Support	IP camera - Support
<b>Object Removed</b>	n/a	n/a	IP camera - Support	IP camera - Support
<b>Object Left Behind</b>	n/a	n/a	IP camera - Support	IP camera - Support
<b>Auto Tracking</b>	n/a	n/a	IP camera - Support	IP camera - Support