




















2013 SELECTION GUIDE










Perfect Combination of Price, Quality & Spec'

July 29, 2013



	Fixed Outdoor Dome				Fixed Outdoor Dome with WDR				
									
	D71	D72	ACM-7411	KCM-7111	E71	E72	E73	E74	E77
Model	D71	D72	ACM-7411	KCM-7111	E71	E72	E73	E74	E77
Product Type	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome
Maximum Resolution	1MP	3MP	1.3MP	4MP	1MP	3MP	5MP	3MP	10MP
Application Environment	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.5 lux, B/W: 0.05 lux at F1.0	Color: 0.1 lux, B/W: 0.05 lux at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes
Lens	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Vari-focal, f3.3-12mm / F1.6, Fixed iris	Fixed focal, f2.8mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris
Viewing Angle Adjustment	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°
Lens Mount	Board mount	Board mount	Board mount	CS mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	72.0°	83.3°	83.0°-23.8°	82.6°	72.0°	83.3°	82.3°	85.7°	TBC
Compression	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG
Maximum Frame Rate vs. Resolution	30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	8 fps at 1280 x 1024 10 fps at 1280 x 720 30 fps at 640 x 480	8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	6 fps at 3648 x 2736 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480
Multi-Streaming	Dual streams	Dual streams	Single streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	No	No	No	Basic WDR	Basic WDR	Basic WDR	Superior WDR	Basic WDR
Digital Noise Reduction	DNR	DNR	No	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	2-way	No	2-way	No	No	No	2-way
Network Protocol & Service	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour
Digital Input/Output	No	No	1/1	2/2	No	No	No	No	1/1
Local Storage	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	No	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)
Power Source	PoE Class 2	PoE Class 2	DC 12V; PoE Class 3	DC 12V; PoE Class 3	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof	Weatherproof (IP66); Vandal proof	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)
Bundled Accessories	No	No	No	No	No	No	No	No	No
Mount Type	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush
Client PC Operating System	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Vista, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP
PC Web Browser	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC
Starting Temperature	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-30°C ~ 50°C (-22°F ~ 122°F)	-30°C ~ 50°C (-22°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)
Operating Temperature	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-30°C ~ 50°C (-22°F ~ 122°F)	-30°C ~ 50°C (-22°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)
Approvals	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66	CE, FCC, IP66	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10

	Indoor Zoom Dome with WDR				Outdoor Zoom Dome with WDR				Hemispheric Dome with WDR	
										
	B61	B64	B67	KCM-3311	B81	B84	B87	KCM-7311	KCM-3911	KCM-7911
Model	B61	B64	B67	KCM-3311	B81	B84	B87	KCM-7311	KCM-3911	KCM-7911
Product Type	Zoom Dome	Zoom Dome	Zoom Dome	Zoom Dome	Zoom Dome	Zoom Dome	Zoom Dome	Zoom Dome	Hemispheric Dome	Hemispheric Dome
Maximum Resolution	5MP	1.3MP	3MP	4MP	5MP	1.3MP	3MP	4MP	4MP	4MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Indoor	Outdoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.2	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 1.63 lux, B/W: 0.06 lux at F2.8	Color: 1.63 lux, B/W: 0.06 lux at F2.8
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	Yes
IR LED	Yes	Yes	Yes	No	Yes	Yes	Yes	No	No	No
Lens	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3.3-12mm / F1.4-2.9, P-Iris	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3-9mm / F1.2-2.1, DC Iris	Zoom, f3.3-12mm / F1.4-2.9, P-Iris	Fisheye, 1.05mm / F2.8, Fixed Iris	Fisheye, 1.05mm / F2.8, Fixed Iris
Zoom Ratio	3x optical	3x optical	3x optical	3.6x optical	3x optical	3x optical	3x optical	3.6x optical		
Viewing Angle Adjustment	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 5°-170°, Rotate: 0°-350°	Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350°		
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	TBC	TBC	TBC	77.2°-22.6°	TBC	TBC	TBC	77.2°-22.6°	180°	180°
Compression	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG
Maximum Frame Rate vs. Resolution	15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 960 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1280 x 720 30 fps at 640 x 480	8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 960 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1280 x 720 30 fps at 640 x 480	8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	6 fps at 2032 x 1920 12 fps at 1920 x 1080 12 fps at 1280 x 720 12 fps at 640 x 480	6 fps at 2032 x 1920 12 fps at 1920 x 1080 12 fps at 1280 x 720 12 fps at 640 x 480
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	Basic WDR	Basic WDR	Superior WDR	Advanced WDR	Basic WDR	Basic WDR	Superior WDR	Advanced WDR	Advanced WDR	Advanced WDR
Digital Noise Reduction	DNR	DNR	DNR	2D+3D DNR	DNR	DNR	2D+3D DNR	DNR	2D+3D DNR	2D+3D DNR
Audio	2-way	2-way	2-way	No	2-way	2-way	2-way	2-way	2-way	2-way
Network Protocol & Service	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour
Digital Input/Output	1/1	1/1	1/1	No	1/1	1/1	1/1	2/2	2/2	2/2
Local Storage	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	No	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)
Power Source	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3
Environmental Casing	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	No	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	No	Weatherproof (IP66)
Bundled Accessories	No	No	No	No	No	No	No	No	No	No
Mount Type	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush	Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Ceiling
Other Value-Added Features				Defogging				Defogging	Mode: 180°/360° Panorama, ePTZ, 6 VGA, MD Preset; Defogging	Mode: 180°/360° Panorama, ePTZ, 6 VGA, MD Preset; Defogging
PC Operating System	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP
PC Web Browser	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9	IE 8, IE 9
Starting Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F)	-20°C ~ 50°C (-22°F ~ 122°F)
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (-22°F ~ 122°F)
Approvals	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66	CE, FCC	CE, FCC, IP66

	Zoom Box				Fixed Cube		Fixed Cube with WDR		
									
	KCM-5211	KCM-5211E	KCM-5511	KCM-5611	D11	D12	E11	E12	E13
Model	KCM-5211	KCM-5211E	KCM-5511	KCM-5611	D11	D12	E11	E12	E13
Product Type	Zoom Box	Zoom Box	Zoom Box	Zoom Box	Cube	Cube	Cube	Cube	Cube
Maximum Resolution	4MP	4MP	2MP	2MP	1MP	3MP	1MP	3MP	5MP
Application Environment	Indoor	Outdoor	Outdoor	Outdoor	Indoor	Indoor	Indoor	Indoor	Indoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	Yes	Yes	Yes	Yes	No	No	No	No	No
Minimum Illumination	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.6	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.0	Color: 0.1 lux at F1.8	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.0
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	No	No	No	No	No
IR LED	No	Yes	Yes	Yes	No	No	No	No	No
Lens	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris	Zoom, f3.2-70.4mm / F1.6-3.8, DC Iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris	Fixed focal, f3.6mm / F2.0, Fixed Iris	Fixed focal, f3.6mm / F2.0, Fixed Iris	Fixed focal, f4.2mm / F1.8, Fixed Iris	Fixed focal, f2.8mm / F2.0, Fixed Iris	Fixed focal, f2.8mm / F2.0, Fixed Iris
Zoom Ratio	18x optical	18x optical	22x optical	18x optical					
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)
Horizontal Viewing Angle	48.9°-3.6°	48.9°-3.6°	57.1°-3.0°	48.9°-3.6°	60.2°	70.8°	53.8°	62.6°	92.6°
Compression	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG
Maximum Frame Rate vs. Resolution	8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	8 fps at 2032 x 1920 15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	Advanced WDR	Advanced WDR	Advanced WDR	No	No	Basic WDR	Basic WDR	Basic WDR
Digital Noise Reduction	DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	DNR	DNR	DNR	DNR	DNR
Audio	2-way	2-way	2-way	2-way	No	No	2-way, built-in microphone	2-way, built-in microphone	2-way, built-in microphone
Network Protocol & Service	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour, Pelco-D	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour
Digital Input/Output	2/2	2/2	2/2	2/2	No	No	No	No	No
Serial Port		RS-485, RS-422	RS-485, RS-422	RS-485, RS-422					
Local Storage	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	No	No	No	No	No
Power Source	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	PoE Class 1	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	No	Weatherproof (IP66)	Weatherproof (IP66)	Weatherproof (IP66)	No	No	No	No	No
Bundled Accessories	No	No	No	No	Bracket	Bracket	Bracket	Bracket	Bracket
Mount Type	Wall, Corner, Pole	Wall, Corner, Pole	Wall, Corner, Pole	Wall, Corner, Pole	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling
Other Value-Added Features		Defogging	Defogging	Defogging					
Client PC Operating System	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP
PC Web Browser	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC
Starting Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F) within 30 minutes	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-30°C ~ 50°C (-22°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)
Approvals	CE, FCC	CE, FCC, IP66	CE, FCC, IP66	CE, FCC, IP66	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

	Outdoor Mini PTZ with WDR			Indoor PTZ				Outdoor PTZ			Outdoor Speed Dome with WDR		
	B94	B96	B97	I91	I92	ACM-8511	KCM-8111	I93	I94	KCM-8211	I95	I96	TCM-6630
Model	B94	B96	B97	I91	I92	ACM-8511	KCM-8111	I93	I94	KCM-8211	I95	I96	TCM-6630
Product Type	Mini PTZ	Mini PTZ	Mini PTZ	PTZ	PTZ	Mini PTZ	PTZ	PTZ	PTZ	PTZ	Speed Dome	Speed Dome	Speed Dome
Maximum Resolution	1.3MP	5MP	3MP	1MP	2MP	0.35MP (D1)	2MP	1MP	2MP	1MP	2MP	2MP	0.35MP (D1)
Application Environment	Outdoor	Outdoor	Outdoor	Indoor PTZ	Indoor PTZ	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor
Image Sensor	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Interlaced Scan CCD	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Progressive Scan CMOS with Superior Low Light Sensitivity	Interlaced Scan CCD
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Illumination	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 2.5 lux, B/W: 0.07 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.01 lux at F1.6
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	No	No	No	No	No	No	No	No	No	No	No	No	No
Lens	Zoom, f4.9-49mm / F1.8-3.0, DC Iris	Zoom, f4.9-49mm / F1.8-3.0, DC Iris	Zoom, f4.9-49mm / F1.8-3.0, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f4.2-42mm / F1.8-2.9, DC Iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f4.3-129mm / F1.6-5.0, DC Iris	Zoom, f3.4-122.4mm / F1.6-4.5, DC Iris
Zoom Ratio	10x optical	10x optical	10x optical	30x optical, 16x digital	30x optical, 16x digital	10x optical, 10x digital	18x optical, 16x digital	30x optical, 16x digital	30x optical, 16x digital	18x optical, 16x digital	30x optical, 16x digital	30x optical, 16x digital	36x optical, 12x digital
Panning and Tilting Range	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-354°; Tilt: -25°-90°	Pan: 0°-360° (with Auto-Flip); Tilt: -10°-190°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-360° (with Auto-Flip); Tilt: -10°-190°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-360° (with Auto-Flip); Tilt: -20°-200°	Pan: 0°-360° (with Auto-Flip); Tilt: -10°-190°
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	TBC	TBC	TBC	TBD	TBD	48.0°-5.0°	48.9°-3.6°	TBD	TBD	48.9°-3.6°	TBD	TBD	57.8°-1.7°
Compression	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	MPEG-4 SP, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264, MPEG-4 SP, MJPEG	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264, MPEG-4 SP, MJPEG
Maximum Frame Rate vs. Resolution	30 fps at 1280 x 960 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2592 x 1944 15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 2048 x 1536 30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 720 x 480 30 fps at 352 x 240	15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	15 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 352 x 240
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Single streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	Basic WDR	Basic WDR	Superior WDR	Extreme WDR	Extreme WDR	No	Advanced WDR	Extreme WDR	Extreme WDR	Advanced WDR	Extreme WDR	Extreme WDR	Superior WDR
Digital Noise Reduction	DNR	DNR	DNR	2D+3D DNR	2D+3D DNR	No	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR
Audio	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way
Network Protocol & Service	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IPv6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour
Digital Input/Output	1/1	1/1	1/1	4/2	4/2	1/1	2/2	4/2	4/2	2/2	4/2	4/2	8/1
Local Storage	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	No	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	No
Power Source	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; High PoE	DC 12V; High PoE	DC 12V; PoE Class 3	DC 12V; High PoE	AC 24V; High PoE	AC 24V; High PoE	DC 12V; High PoE	AC 24V; High PoE	AC 24V; High PoE	AC 24V
Environmental Casing	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal proof (IK10)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	No	Vandal Resistant (IK09)	Weatherproof (IP66); Vandal Resistant (IK09)	Weatherproof (IP66); Vandal Resistant (IK09)	Weatherproof (IP66); Vandal proof (IK10)	Weatherproof (IP66); Vandal Resistant (IK09)	Weatherproof (IP66); Vandal Resistant (IK09)	Weatherproof (IP66); Vandal proof (IK10)
Bundled Accessories	No	No	No	Surface mount; Power adapter	Surface mount; Power adapter	Surface mount	Surface mount; Power adapter	Power adapter	Power adapter	Power adapter	Power adapter	Power adapter	Power adapter
Mount Type	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush, Gang Box	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole
Other Value-Added Features				Defogging	Defogging		Defogging	Defogging	Defogging	Defogging	Defogging	Defogging	
Client PC Operating System	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Vista, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Vista, Windows XP
PC Web Browser	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9, Firefox with VLC, Chrome with VLC	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9
Starting Temperature	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	0°C ~ 45°C (32°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-30°C ~ 45°C (-22°F ~ 113°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-45°C ~ 50°C (-49°F ~ 122°F)
Operating Temperature	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	0°C ~ 45°C (32°F ~ 113°F)	-10°C ~ 45°C (14°F ~ 113°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 45°C (-40°F ~ 113°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-45°C ~ 50°C (-49°F ~ 122°F)
Approvals	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IK09	CE, FCC, IK09	CE, FCC	CE, FCC, IK09	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66, IK10	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66






Video Management System

Standalone NVR



	ENR-1000	ENR-1100	ENR-1200	ENR-2000	GNR-3000
Model	ENR-1000	ENR-1100	ENR-1200	ENR-2000	GNR-3000
Product Type	Mini Standalone NVR	Mini Standalone NVR	Mini Standalone NVR	Desktop Standalone NVR	Desktop Standalone NVR
Maximum Number of Cameras	4	9	16	16	64
Maximum Number of Clients	1 local, 2 remote	1 local, 2 remote	1 local, 2 remote	1 local, 2 remote	1 local, 4 remote
Free License	4	9	16	16	64
Video Resolution	Up to 2-Megapixel (Local display), Up to 5-Megapixel (Remote display)	Up to 2-Megapixel (Local display), Up to 5-Megapixel (Remote display)	Up to 2-Megapixel (Local display), Up to 5-Megapixel (Remote display)	Up to 2-Megapixel (Local display), Up to 5-Megapixel (Remote display)	Up to 5-Megapixel
Compression	H.264	H.264	H.264	H.264	H.264, MPEG-4, MJPEG
Scheduled Recording	Yes	Yes	Yes	Yes	Yes
Event Recording	Yes	Yes	Yes	Yes	Yes
Manual Recording	Yes	Yes	Yes	Yes	Yes
Speed Up	Yes	Yes	Yes	Yes	Yes
Dual Stream Management					Yes
Recording Throughput	4 channels at 1080p/30fps	9 channels at 1080p/30fps	16 channels at 1080p/30fps	16 channels at 1080p/30fps	64 channels at 5MP/15fps
HDD Interface	Maximum 2 SATA disks	Maximum 2 SATA disks	Maximum 2 SATA disks	Maximum 4 SATA disks	Maximum 5 SATA disks (1 system disk included)
External Storage Interface					eSATA, iSCSI, USB
Display Layout Mode	1, 2, 4	1, 2, 4, 6, 9	1, 2, 4, 6, 9, 10, 12, 13, 16	1, 2, 4, 6, 9, 10, 12, 13, 16	1, 4, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64
Digital Zoom	Yes	Yes	Yes	Yes	Yes
Event Status	Display event status upon alarm or upon connection loss or recovery between server and client	Display event status upon alarm or upon connection loss or recovery between server and client	Display event status upon alarm or upon connection loss or recovery between server and client	Display event status upon alarm or upon connection loss or recovery between server and client	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full
Instant Playback					Instant Playback in live view window
e-Map					Yes
PTZ Control	Yes	Yes	Yes	Yes	Yes
Playback Control	Continuous forward and backward playback with speeds 0.5x/1x/2x/4x/8x/16x/32x; pause; stop	Continuous forward and backward playback with speeds 0.5x/1x/2x/4x/8x/16x/32x; pause; stop	Continuous forward and backward playback with speeds 0.5x/1x/2x/4x/8x/16x/32x; pause; stop	Continuous forward and backward playback with speeds 0.5x/1x/2x/4x/8x/16x/32x; pause; stop	Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop
Synchronized Playback	4 channels	9 channels	16 channels	16 channels	9 channels (local), 64 channels (remote)
Local Access	HDMI monitor, USB keyboard & mouse	HDMI monitor, USB keyboard & mouse	HDMI monitor, USB keyboard & mouse	HDMI monitor, USB keyboard & mouse	VGA port for monitor, USB joystick, keyboard & mouse
Remote Access	Web Client (IE)	Web Client (IE)	Web Client (IE)	Web Client (IE)	Workstation, Web Client (IE), Mobile Client (iOS)
Event Trigger	Video motion detection; External device through digital input; Network loss and recovery	Video motion detection; External device through digital input; Network loss and recovery	Video motion detection; External device through digital input; Network loss and recovery	Video motion detection; External device through digital input; Network loss and recovery	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery; Server loss and recovery; Disk full; Disk not found
Event Response	Record video; Pop-up window; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Hotspot window; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point
Permission Control	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups
Video Export	USB	USB	USB	USB	eSATA, iSCSI, USB
PC Operating System	Windows 7	Windows 7	Windows 7	Windows 7	Windows 8, Windows 7, Windows Server 2012
PC Web Browser	IE 9, IE 10	IE 9, IE 10	IE 9, IE 10	IE 9, IE 10	IE 8, IE 9, IE 10
Operating Temperature	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)	0°C ~ 40°C (32°F ~ 104°F)
Approvals	CE/FCC	CE/FCC	CE/FCC	CE/FCC	CE/FCC

Video Management System

	Software NVR			Central Management System	
					
	NVR 2.3 Ent	NVR 2.3 Pro	NVR 3.0	CMS 1.1	CMS 2.0
Model	NVR 2.3 Ent	NVR 2.3 Pro	NVR 3.0	CMS 1.1	CMS 2.0
Product Type	Software NVR	Software NVR	Software NVR	Central Management System	Central Management System
Maximum Number of Cameras	64	64	100	Unlimited	Unlimited
Maximum Number of Clients	1 local, 5 remote (concurrent)	1 local	1 local, 5 remote (concurrent)	1 local, 5 remote (concurrent)	1 local, 5 remote (concurrent)
Free License	16	64	16	0	0
Video Resolution	Up to 5-Megapixel	Up to 5-Megapixel	Support all ACTI cameras in all resolutions	Up to 5-Megapixel	Support all ACTI cameras in all resolutions
Compression	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG
Scheduled Recording	Yes	Yes	Yes	N/A	N/A
Event Recording	Yes	Yes	Yes	N/A	N/A
Manual Recording	Yes	Yes	Yes	Yes	Yes
Speed Up	N/A	N/A	Yes	N/A	N/A
Dual Stream Management	Yes	Yes	Yes	Yes	Yes
Recording Throughput	64 channels at 5MP/15fps	64 channels at 5MP/15fps	100 channels at 5MP/15fps	N/A	N/A
Display Layout Mode	1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64	1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64	1, 4, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, 81, 100, Custom	1, 4, 6, 8, 9, 12, 16, 36, 48, 49, 64	1, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, 81, 100, Custom
Digital Zoom	Yes	Yes	Yes	Yes	Yes
Event Status	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full	Display event status upon alarm or when the allocated disk space is full	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full	Display event status upon alarm or upon connection loss or recovery between server and client or when the allocated disk space is full
Instant Playback	N/A	N/A	Instant Playback in live view window		Instant Playback in live view window
e-Map	Yes	Yes	Yes	Yes	Yes
PTZ Control	Yes	Yes	Yes	Yes	Yes
Playback Control	Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop	Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop	Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop	Forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop	Continuous forward and backward playback with speeds 1x/2x/4x/8x or frame-by-frame; pause; stop
Synchronized Playback	4 channels	4 channels	100 channels	4 channels	100 channels
Local Access	monitor, joystick, keyboard & mouse	monitor, joystick, keyboard & mouse	monitor, joystick, keyboard & mouse	monitor, joystick, keyboard & mouse	monitor, joystick, keyboard & mouse
Remote Access	Workstation, Web Client (IE), Mobile Client (iOS)	Workstation, Web Client (IE)	Workstation, Web Client (IE), Mobile Client (iOS & Android)	Workstation, Web Client (IE)	Workstation, Web Client (IE), Mobile Client (iOS & Android)
Event Trigger	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery; Server loss and recovery; Disk full; Disk not found	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery	NVR: Source loss and recovery; Schedule service start and stop; Disk status Device: Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery
Event Response	Record video; Pop-up window; Hotspot window; Play audio file or Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Hotspot window; Play audio file or Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Pop-up window; Hotspot window; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point	Pop-up window; Hotspot window; Play audio file or Beep	NVR: Play beep sound; Execute system command to activate other programs; E-mail notification Device: Pop-up window with live video; Switch to hotspot window; Play beep sound
Permission Control	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups	Unlimited number of users, Active Directory, Customizable permissions for user groups
PC Operating System	Windows 7	Windows 7	Windows 8, Windows 7, Windows Server 2012	Windows 7	Windows 8, Windows 7, Windows Server 2012
PC Web Browser	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9, IE 10	IE 8, IE 9	IE 8, IE 9, IE 10