






















	Fixed Indoor Dome				
					
Model	D51	D52	D54	D55	TCM-3111
Product Type	Dome	Dome	Dome	Dome	Dome
Maximum Resolution	1MP	3MP	3MP	3MP	1.3MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	No	Yes	Yes	Yes	No
Superior Low Light Sensitivity	No	No	No	No	No
Minimum Illumination	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.0	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.5 lux, B/W: 0.5 lux at F1.0
Mechanical IR Cut Filter	No	No	Yes	Yes	No
IR LED	No	No	Yes (Adaptive)	Yes (Adaptive)	No
IR Working Distance			20m	20m	
Lens	Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus
Viewing Angle Adjustment	Pan: 0°-330°, Tilt: 0°-180°	Pan: 0°-330°, Tilt: 0°-180°	Pan: 0°-330°, Tilt: 20°-90°	Pan: 0°-330°, Tilt: 20°-90°	Pan: 0°-170°, Tilt: 0°-180°
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	60.2°	70.8°	60.6°	72.0°	68.2°
Compression	H.264 High Profile, MJPEG	H.264 High Profile, 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 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	18 fps at 1280 x 1024 26 fps at 1280 x 720 30 fps at 640 x 480
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	No	No	No	No
Digital Noise Reduction	DNR	DNR	DNR	DNR	No
Audio	No	No	No	No	No
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
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45
Digital Input/Output	No	No	No	No	No
Local Storage	No	No	No	No	No
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	No	No	No	No	No
Bundled Accessories	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
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 Vista, Windows XP
PC Web Browser	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes
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)
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)
Approvals	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC







	Fixed Outdoor Dome				Fixed Outdoor Dome with WDR							
												
Model	D71	D71A	D72	KCM-7111	E71	E72	E73	E74A	E75	E76	E77	
Product Type	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	
Maximum Resolution	1MP	1MP	3MP	4MP	1MP	3MP	5MP	3MP	1.3MP	2MP	10MP	
Application Environment	Outdoor	Outdoor	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	Progressive Scan CMOS	Progressive Scan CMOS	
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Superior Low Light Sensitivity	No	No	No	Yes	No	No	No	No	Yes	Yes	No	
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: 0.1 lux, B/W: 0 lux (IR LED on) at F2.0	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 F1.85	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.85	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	Yes	Yes	
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	No	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	
IR Working Distance	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	
Lens	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.8mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f2.93mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus	
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: 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°	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	Board mount	Board mount	
Horizontal Viewing Angle	72.0°	72.0°	83.3°	82.6°	72.0°	83.3°	82.3°	85.7°	77.9°	87.5°	101.4°	
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 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	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 2022 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	30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240	30 fps at 1920 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240	6 fps at 3648 x 2736 6 fps at 3648 x 2160 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 15 fps at 320 x 240	
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	
Wide Dynamic Range	No	No	No	No	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Superior WDR (110 dB)	Basic WDR (88 dB)	Basic WDR (75 dB)	Basic WDR (70 dB)	
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	
Audio	No	2-way (Line-in, Line-out)	No	2-way (Line-in, Line-out)	No	2-way (Line-in, Line-out)	No	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	
Network Protocol & Service	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour	TCP, UDP, HTTP, HTTPS, DHCP, PPPoE, RTP, RTSP, IP6, DNS, DDNS, NTP, ICMP, ARP, IGMP, SMTP, FTP, UPnP, SNMP, Bonjour
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	
Digital Input/Output	No	1/1	No	2/2	No	No	No	1/1	1/1	1/1	1/1	
Local Storage	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	DC 12V; PoE Class 3	PoE Class 2	PoE Class 2	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 (IK10)	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)	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	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, 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	
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	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 10, IE 11, Firefox with VLC, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VCL, Chrome with VCL, Safari with Quicktime	
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Starting Temperature	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°F ~ 122°F)	-20°C ~ 50°C (-4°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)	-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)	-40°C ~ 50°C (-40°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)	-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, NEMA 4X	CE, FCC, IP66, IK10	CE, FCC, IP66	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	

<b>Vari-Focal Outdoor Dome with WDR</b>											
											
Model	D81		D81A		D82		D82A		ACM-7411		
Product Type	Dome		Dome		Dome		Dome		Dome		
Maximum Resolution	1MP		1MP		3MP		3MP		1.3MP		
Application Environment	Outdoor		Outdoor		Outdoor		Outdoor		Outdoor		
Image Sensor	Progressive Scan CMOS		Progressive Scan CMOS		Progressive Scan CMOS		Progressive Scan CMOS		Progressive Scan CMOS		
Day / Night	Yes		Yes		Yes		Yes		Yes		
Superior Low Light Sensitivity	No		No		No		No		No		
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4		Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4		Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4		Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4		Color: 0.5 lux, B/W: 0.05 lux at F1.0		
Mechanical IR Cut Filter	Yes		Yes		Yes		Yes		Yes		
IR LED	Yes (Adaptive)		Yes (Adaptive)		Yes (Adaptive)		Yes (Adaptive)		No		
IR Working Distance	30m		30m		30m		30m		30m		
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus		Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus		Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus		Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus		Vari-focal, f3.3-12mm / F1.6, Fixed iris, Manual focus		
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: 17°-163°, Rotate: 0°-350°		Pan: 0°-350°, Tilt: 17°-163°, Rotate: 0°-350°		Pan: 0°-350°, Tilt: 0°-180°, Rotate: 0°-350°		
Lens Mount	Board mount		Board mount		Board mount		Board mount		Board mount		
Horizontal Viewing Angle	59.8°-24.7°		59.8°-24.7°		70.5°-28.2°		70.5°-28.2°		83.0°-23.8°		
Compression	H.264 High Profile, MJPEG		H.264 High Profile, MJPEG		H.264 High Profile, MJPEG		H.264 High Profile, MJPEG		MPEG-4 SP, MJPEG		
Maximum Frame Rate vs. Resolution	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 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		
Multi-Streaming	Dual streams		Dual streams		Dual streams		Dual streams		Single streams		
Wide Dynamic Range	No		No		No		No		No		
Digital Noise Reduction	DNR		DNR		DNR		DNR		DNR		
Audio	No		2-way (Line-in, Line-out)		No		2-way (Line-in, Line-out)		2-way (Line-in, Line-out)		
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		
Network Connector	RJ-45		RJ-45		RJ-45		RJ-45		RJ-45		
Digital Input/Output	No		1/1		No		1/1		1/1		
Local Storage	MicroSDHC/MicroSDXC memory card slot (card not included)		MicroSDHC/MicroSDXC memory card slot (card not included)		MicroSDHC/MicroSDXC memory card slot (card not included)		MicroSDHC/MicroSDXC memory card slot (card not included)		No		
Power Source	PoE Class 2		PoE Class 2		PoE Class 2		PoE Class 2		DC 12V; PoE Class 3		
Environmental Casing	Weatherproof (IP66); Vandal proof (IK10)		Weatherproof (IP66); Vandal proof (IK10)		Weatherproof (IP66); Vandal proof (IK10)		Weatherproof (IP66); Vandal proof (IK10)		Weatherproof (IP66); Vandal proof		
Bundled Accessories	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		
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 Vista, Windows XP		
PC Web Browser	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime		IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime		IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime		IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime		IE 8, IE 9		
ONVIF Compliant	Yes		Yes		Yes		Yes		No		
Heater									Yes		
Fan									Yes		
Starting Temperature	-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)		-30°C ~ 50°C (-22°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)		-40°C ~ 50°C (-40°F ~ 122°F)		-30°C ~ 50°C (-22°F ~ 122°F)		
Approvals	CE, FCC, IP66, IK10		CE, FCC, IP66, IK10, NEMA 4X		CE, FCC, IP66, IK10		CE, FCC, IP66, IK10, NEMA 4X		CE, FCC, IP66		



Vari-Focal Outdoor Dome with WDR










Model	E01	E02	E02A	E03	E03A	E04	E04A	E05	E06	E06A	E08	E09	
Product Type	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	Dome	
Maximum Resolution	1MP	3MP	3MP	3MP	5MP	2MP	2MP	1MP	3MP	3MP	1.3MP	10MP	
Application Environment	Outdoor	Outdoor	Outdoor	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	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Superior Low Light Sensitivity	No	No	No	No	No	No	No	No	No	No	No	No	
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	
IR Working Distance	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed Iris, Manual focus	Vari-focal, f3.1-13.3mm / F1.4, Fixed Iris, Manual focus	
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: 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°	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: 5°-170°, 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	Board mount	Board mount	
Horizontal Viewing Angle	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	70.5° x 28.2°	83.0° x 31.2°	
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	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	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	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 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 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 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 960 60 fps at 1280 x 720 30 fps at 640 x 480	30 fps at 1280 x 960 60 fps at 1280 x 720 30 fps at 640 x 480	6 fps at 3648 x 2736 6 fps at 3648 x 2160 6 fps at 2592 x 1944 6 fps at 2048 x 1536 30 fps at 1280 x 1080 30 fps at 1280 x 720 30 fps at 640 x 480 15 fps at 320 x 240	
Multi-Streaming	Dual streams	Dual streams	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 (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (75 dB)	Basic WDR (75 dB)	Basic WDR (75 dB)	Superior WDR (110 dB)	Superior WDR (110 dB)	Superior WDR (110 dB)	Basic WDR (88 dB)	
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	
Audio	No	No	2-way (Line-in, Line-out)	No	2-way (Line-in, Line-out)	No	2-way (Line-in, Line-out)	No	No	No	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	
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
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	
Digital Input/Output	No	No	1/1	No	1/1	No	1/1	No	No	1/1	No	2/2	
Local Storage	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	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 (IK10)	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)	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	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	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 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, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Starting Temperature	-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)	-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)	-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)	-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)	-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, IK10, NEMA 4X	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X	









	Fixed Bullet				Fixed Bullet with WDR			
								
Model	D31	D32	E31	E32	E33	E34	E37	
Product Type	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	
Maximum Resolution	1MP	3MP	1MP	3MP	5MP	3MP	10MP	
Application Environment	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	
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Superior Low Light Sensitivity	No	No	No	No	No	No	No	
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.85	
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	
IR Working Distance	20m	20m	30m	30m	30m	30m	30m	
Lens	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.8, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F1.85, Fixed iris, Fixed focus	
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	
Horizontal Viewing Angle	55.9°	62.7°	55.9°	62.7°	62.7°	68.0°	101.4°	
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	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	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 3648 x 2160 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 15 fps at 320 x 240	
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	
Wide Dynamic Range	No	No	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Superior WDR (110 dB)	Basic WDR (70 dB)	
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	
Audio	No	No	No	No	No	No	No	
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	
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	
Digital Input/Output	No	No	No	No	No	No	No	
Local Storage	No	No	No	No	No	No	MicroSDHC/MicroSDXC memory card slot (card not included)	
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	
Environmental Casing	Weatherproof (IP66)	Weatherproof (IP66)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	
Bundled Accessories	Bracket	Bracket	Bracket	Bracket	Bracket	Bracket	Bracket	
Mount Type	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	
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	
PC Web Browser	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Starting Temperature	-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)	-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)	-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	CE, FCC, IP66	CE, FCC, IP68, IK10 (metal casing)	CE, FCC, IP68, IK10 (metal casing)	CE, FCC, IP68, IK10 (metal casing)	CE, FCC, IP68, IK10 (metal casing)	CE, FCC, IP68, NEMA 4X, IK10 (metal casing)	

Model	Vari-Focal Bullet						Vari-Focal Bullet with WDR					
	D41	D42	D42A	E41	E41A	E42A	E43A	E43B	E44	E45	E46	E47
Product Type	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet	Bullet
Maximum Resolution	3MP	3MP	3MP	3MP	3MP	3MP	3MP	3MP	3MP	3MP	3MP	3MP
Application Environment	Outdoor	Outdoor	Outdoor	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	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Superior Low Light Sensitivity	No	No	No	No	No	No	No	No	Yes	Yes	No	Yes
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	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 F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F1.4
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)
IR Working Distance	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m	30m
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f3.3-12mm / F1.6, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus	Vari-focal, f2.8-12mm / F1.4, Fixed iris, Manual focus
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
Horizontal Viewing Angle	59.8°-24.7°	70.5°-28.2°	70.5°-28.2°	69.8°-19.1°	59.8°-24.7°	70.5°-28.2°	69.2°-28.2°	69.2°-28.2°	92.5°-35.9°	60.1°-24.3°	70.5°-28.8°	83°-31.1°
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	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	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	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 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 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 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 960 60 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	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	No	No	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (75 dB)	Basic WDR (110 dB)	Basic WDR (110 dB)	Basic WDR (88 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	2-way (Line-in, Line-out)	No	No	No	No	No	2-way (Line-in, Line-out)	No	No	2-way (Line-in, Line-out)
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
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45
Digital Input/Output	No	1/1	No	No	No	No	No	1/1	No	No	No	1/1
Local Storage	No	No	MicroSDHC/MicroSDXC memory card slot (card not included)	No	No	No	No	MicroSDHC/MicroSDXC memory card slot (card not included)	No	No	No	MicroSDHC/MicroSDXC memory card slot (card not included)
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP68); Vandal proof metal casing (IK10)	Weatherproof (IP66); Vandal proof metal casing (IK10)
Bundled Accessories	Bracket	Bracket	Bracket	Bracket	Bracket	Bracket	Bracket	Bracket	Integrated Bracket	Integrated Bracket	Integrated Bracket	Bracket
Mount Type	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Corner, Pole	Wall, Ceiling, Pole, Gang Box	Wall, Ceiling, Pole, Gang Box	Wall, Ceiling, Pole, Gang Box	Wall, Ceiling, Corner, Pole
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	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 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Starting Temperature	-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)	-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)	-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)	-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)	-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 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, NEMA 4X, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, NEMA 4X, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, NEMA 4X, IK10 (metal casing)





















### Box with Zoom Lens



	KCM-5211	KCM-5211E	KCM-5511	KCM-5611
Model	KCM-5211	KCM-5211E	KCM-5511	KCM-5611
Product Type	Zoom Box	Zoom Box	Zoom Box	Zoom Box
Maximum Resolution	4MP	4MP	2MP	2MP
Application Environment	Indoor	Outdoor	Outdoor	Outdoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	Yes	Yes	Yes	Yes
Superior Low Light Sensitivity	Yes	Yes	Yes	Yes
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
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes
IR LED	No	Yes	Yes	Yes
IR Working Distance			20m	20m
Lens	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris, Auto focus	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris, Auto focus	Zoom, f3.2-70.4mm / F1.6-3.8, DC Iris, Auto focus	Zoom, f4.7-84.6mm / F1.6-2.8, DC Iris, Auto focus
Zoom Ratio	18x optical	18x optical	22x optical	18x optical
Lens Mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	48.9°-3.6°	48.9°-3.6°	57.1°-3.0°	48.9°-3.6°
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
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
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	Advanced WDR (80 dB)	Advanced WDR (80 dB)	Advanced WDR
Digital Noise Reduction	DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR
Audio	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)
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
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45
Digital Input/Output	2/2	2/2	2/2	2/2
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)
Power Source	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3
Environmental Casing	No	Weatherproof (IP66)	Weatherproof (IP66)	Weatherproof (IP66)
Bundled Accessories	No	No	No	No
Mount Type	Wall, Corner, Pole	Wall, Corner, Pole	Wall, Corner, Pole	Wall, Corner, Pole
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
PC Web Browser	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9
ONVIF Compliant	Yes	Yes	Yes	Yes
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
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)
Approvals	CE, FCC	CE, FCC, IP66	CE, FCC, IP66	CE, FCC, IP66

	Cube		Cube with WDR		
					
Model	D11	D12	E11	E12	E13
Product Type	Cube	Cube	Cube	Cube	Cube
Maximum Resolution	1MP	3MP	1MP	3MP	5MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor
Image Sensor	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS	Progressive Scan CMOS
Day / Night	No	No	No	No	No
Superior Low Light Sensitivity	No	No	No	No	No
Minimum Illumination	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	No	No	No	No	No
IR LED	No	No	No	No	No
Lens	Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f3.6mm / F2.0, Fixed iris, Fixed focus	Fixed focal, f4.2mm / F1.8, Fixed iris, Manual focus	Fixed focal, f2.8mm / F2.0, Fixed iris, Manual focus	Fixed focal, f2.8mm / F2.0, Fixed iris, Manual focus
Lens Mount	Board mount	Board mount	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)
Horizontal Viewing Angle	60.2°	70.8°	53.8°	92.6°	92.6°
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
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	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
Wide Dynamic Range	No	No	Basic WDR (74 dB)	Basic WDR (74 dB)	Basic WDR (74 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR
Audio	No	No	2-way (Built-in Microphone, Line-out)	2-way (Built-in Microphone, Line-out)	2-way (Built-in Microphone, Line-out)
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
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45
Digital Input/Output	No	No	No	No	No
Local Storage	No	No	No	No	No
Power Source	PoE Class 1	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	No	No	No	No	No
Bundled Accessories	Bracket	Bracket	Bracket	Bracket	Bracket
Mount Type	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling	Wall, Ceiling
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
PC Web Browser	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes
Starting Temperature	-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 ~ 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	CE, FCC	CE, FCC	CE, FCC



	PTZ						Mini PTZ				
											
Model	I91	I92	I93	I94	KCM-8111	KCM-8211	B94	B95	B96	B97	
Product Type	PTZ	PTZ	PTZ	PTZ	PTZ	PTZ	Mini PTZ	Mini PTZ	Mini PTZ	Mini PTZ	
Maximum Resolution	1MP	2MP	1MP	2MP	2MP	2MP	1.3MP	2MP	3MP	3MP	
Application Environment	Indoor	Indoor	Indoor	Outdoor	Indoor	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	Progressive Scan CMOS	
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Superior Low Light Sensitivity	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No	No	
Minimum Illumination	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: 0.05 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 F1.8	
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IR LED	No	No	No	No	No	No	No	No	No	No	
Lens	Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus	Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus	Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus	Zoom, f4.3-129mm / F1.6-5.0, DC iris, Auto focus	Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus	Zoom, f4.7-84.6mm / F1.6-2.8, DC iris, Auto focus	Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus	Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus	Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus	Zoom, f4.9-49mm / F1.8-3.0, DC iris, Auto focus	
Zoom Ratio	30x optical, 16x digital	30x optical, 16x digital	30x optical, 16x digital	30x optical, 16x digital	18x optical, 16x digital	18x optical, 16x digital	10x optical	10x optical	10x optical	10x optical	
Panning and Tilt Range	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-360° (with Auto-Flip); Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	Pan: 0°-350°, Tilt: 0°-180°	
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	66.4°-2.68°	66.4°-2.68°	66.4°-2.68°	66.4°-2.61°	48.9°-3.6°	48.9°-3.6°	52.1°-5.9°	57.8°-6.9°	49.7°-5.8°	49.6°-5.6°	
Compression	H.264 High Profile, 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 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	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	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 960 60 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 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	
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	Extreme WDR (145 dB)	Extreme WDR (145 dB)	Extreme WDR (145 dB)	Extreme WDR (145 dB)	Extreme WDR (145 dB)	Advanced WDR (80 dB)	Basic WDR (88 dB)	Basic WDR (75 dB)	Basic WDR (74 dB)	Superior WDR (110 dB)	
Digital Noise Reduction	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR	DNR	DNR	DNR	DNR	
Audio	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	
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	
Network Connector	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	RJ-45	
Digital Input/Output	2/2	2/2	4/2	4/2	2/2	2/2	1/1	1/1	1/1	1/1	
Local Storage	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	
Power Source	DC 12V; High PoE	DC 12V; High PoE	AC 24V; High PoE	AC 24V; High PoE	DC 12V; High PoE	DC 12V; High PoE	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)	Weatherproof (IP67); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10)	Weatherproof (IP67); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10)	Vandal Resistant (IK09)	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	Surface mount; Power adapter	Surface mount; Power adapter	Power adapter	Power adapter	Surface mount; Power adapter	Power adapter	No	No	No	No	
Mount Type	Surface, Pendant, Wall, Corner, Pole, Flush	Surface, Pendant, Wall, Corner, Pole, Flush	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Surface, Pendant, Wall, Corner, Pole, Flush	Pendant, Wall, Corner, Pole	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	
Other Value-Added Features	Defogging, Advanced Image Stabilizer	Defogging, Advanced Image Stabilizer	Defogging, Advanced Image Stabilizer	Defogging, Advanced Image Stabilizer	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	Windows 7, Windows Server 2008, Windows Vista, Windows Server 2003, Windows XP	
PC Web Browser	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9	IE 8, IE 9	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Heater	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Fan	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Starting Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-10°C ~ 45°C (14°F ~ 113°F)	-30°C ~ 45°C (-22°F ~ 113°F) within 30 minutes	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	-20°C ~ 50°C (-4°F ~ 122°F) within 30 minutes	
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°F)	-10°C ~ 50°C (14°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-40°C ~ 50°C (-40°F ~ 122°F)	-10°C ~ 45°C (14°F ~ 113°F)	-40°C ~ 45°C (-40°F ~ 113°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)	
Approvals	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IP67, IK09, NEMA 4X	CE, FCC, IP67, IK09, NEMA 4X	CE, FCC, IK09	CE, FCC, IK10	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	





### Speed Dome



I95



I96



TCM-6630

	I95	I96	TCM-6630
Model	Speed Dome	Speed Dome	Speed Dome
Product Type	1MP	2MP	0.35MP (D1)
Maximum Resolution	Outdoor	Outdoor	Outdoor
Application Environment	Progressive Scan CMOS	Progressive Scan CMOS	Interlaced Scan CCD
Image Sensor	Yes	Yes	Yes
Day / Night	Yes	Yes	No
Superior Low Light Sensitivity	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
Minimum Illumination	Yes	Yes	Yes
Mechanical IR Cut Filter	No	No	No
IR LED	Zoom, f4.3-129mm / F1.6-5.0, DC Iris, Auto focus	Zoom, f4.3-129mm / F1.6-5.0, DC Iris, Auto focus	Zoom, f3.4-122.4mm / F1.6-4.5, DC Iris, Auto focus
Lens	30x optical, 16x digital	30x optical, 16x digital	36x optical, 12x digital
Zoom Ratio	Pan: 0°-360° endless; Tilt: -20°-200°	Pan: 0°-360° endless; Tilt: -20°-200°	Pan: 0°-360° endless; Tilt: -10°-190°
Panning and Tilting Range	Board mount	Board mount	Board mount
Lens Mount	66.4°-2.68°	66.4°-2.61°	57.8°-1.7°
Horizontal Viewing Angle	H.264 High Profile, MJPEG	H.264 High Profile, MJPEG	H.264, MPEG-4 SP, MJPEG
Compression	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
Maximum Frame Rate vs. Resolution	Dual streams	Dual streams	Dual streams
Multi-Streaming	Extreme WDR (145 dB)	Extreme WDR (145 dB)	Superior WDR
Wide Dynamic Range	2D+3D DNR	2D+3D DNR	2D+3D DNR
Digital Noise Reduction	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)	2-way (Line-in, Line-out)
Audio	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
Network Protocol & Service	RJ-45	RJ-45	RJ-45
Network Connector	4/2	4/2	8/1
Digital Input/Output	MicroSDHC/MicroSDXC memory card slot (card not included)	MicroSDHC/MicroSDXC memory card slot (card not included)	No
Local Storage	AC 24V, High PoE	AC 24V, High PoE	AC 24V
Power Source	Weatherproof (IP67); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10)	Weatherproof (IP67); Vandal Proof casing (IK10); bundled dome cover (IK09), optional dome cover (IK10)	Weatherproof (IP66)
Environmental Casing	Power adapter	Power adapter	Power adapter
Bundled Accessories	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole	Pendant, Wall, Corner, Pole
Mount Type	Defogging, Advanced Image Stabilizer	Defogging, Advanced Image Stabilizer	
Other Value-Added Features	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
Client PC Operating System	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9, IE 10, IE 11, Firefox with VLC, Chrome with VLC, Safari with Quicktime	IE 8, IE 9
PC Web Browser	Yes	Yes	Yes
ONVIF Compliant	Yes	Yes	Yes
Heater	Yes	Yes	Yes
Fan	Yes	Yes	Yes
Starting Temperature	-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)	-45°C ~ 50°C (-49°F ~ 122°F)
Approvals	CE, FCC, IP67, IK09, NEMA 4X	CE, FCC, IP67, IK09, NEMA 4X	CE, FCC, IP66



### Video Encoder



### Video Decoder








	Video Encoder	Video Decoder	
Model	ACD-2100	ACD-3100	ECD-1000
Number of Channels	1	1	16
Compression	MPEG-4 SP, MJPEG	MPEG-4 SP, MPEG-4 ASP	H.264
Maximum Frame Rate vs. Resolution	30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL) 30 fps at 352 x 240 (NTSC) 25 fps at 352 x 288 (PAL) 30 fps at 160 x 112 (NTSC) 25 fps at 176 x 144 (PAL)	30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL)	30 fps at 1920 x 1080 30 fps at 720 x 480 25 fps at 720 x 576 30 fps at 640 x 480
Multi-Streaming	Single streams	No	No
Wide Dynamic Range	No	No	No
Audio	2-way	2-way	No
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, IP, HTTP, DHCP, PPPoE, RTP, RTSP
Analog Video Input	BNC x 1		
Analog Video Output	BNC x 1	BNC x 1; S-Video x 1	1, BNC
HDMI Output			1, HDMI Type A
Digital Input/Output	2/2	2/2	
Serial Port	RS-485, RS-422, RS-232	RS-485, RS-422, RS-232	
Power Source	DC 12V	DC 12V	DC 12V; PoE Class 3
Bundled Accessories			Pole Mount
Mount Type			Surface, Pole, VESA 10x10
Local Access			USB Mouse
Remote Access		Web Client (IE)	Web Client (IE)
Event Trigger			Video Loss
Event Response			Beep
Client PC Operating System	Windows 7, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Vista, Windows Server 2003, Windows XP	Windows 7, Windows Vista, Windows Server 2003, Windows XP
PC Web Browser	IE 6, IE 7, IE 8	IE 6, IE 7, IE 8	IE 9
Starting Temperature		0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Operating Temperature	0°C ~ 50°C (32°F ~ 122°F) ACD-2100T: -30°C ~ 70°C (-22°F ~ 158°F)	0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Approvals	CE, FCC	CE, FCC	CE, FCC





## Video Management System

	Video Management System				
	Software NVR			Central Management System	
					
Model	NVR 2.3 Ent	NVR 2.3 Pro	NVR 3.0	CMS 1.1	CMS 2.0
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
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Scheduled Recording	Yes	Yes	Yes		
Event Recording	Yes	Yes	Yes		
Manual Recording	Yes	Yes	Yes	Yes	Yes
Speed Up			Yes		
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		
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, 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, 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			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	64 channels	4 channels	64 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
Server Operating System	Windows 7	Windows 7	Windows 8, Windows 7, Windows Server 2012	Windows 7	Windows 8, Windows 7, Windows Server 2012
Client 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
ONVIF Compliant	No	No	Yes (Support ONVIF Compliant cameras with NVR3 v3.0.08 or newer version)	No	Yes (Support ONVIF Compliant cameras with CMS2 v2.0.07 or newer version)