

# 2014 SELECTION GUIDE

We deliver **QUALITY, SPECIFICATION** and **PRICE** at the same time.

March, 2014 V1




**30x  
HD**

**30x  
FULL HD  
1080P**

**30x  
HD**

**30x  
FULL HD  
1080P**

**18x  
FULL HD  
1080P**

**18x  
FULL HD  
1080P**

Model	I91	I92	I93	I94	KCM-8111	KCM-8211
Maximum Resolution	1MP	2MP	1MP	2MP	2MP	2MP
Application Environment	Indoor	Indoor	Outdoor	Outdoor	Indoor	Outdoor
Image Sensor	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
Superior Low Light Sensitivity	Yes	Yes	Yes	Yes	Yes	Yes
Minimum Illumination	Color: 0.1 lux, B/W: 0.05 lux at F1.6	Color: 0.1 lux, B/W: 0.05 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
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes
Lens	Zoom, f4.3-129mm / F1.6-5.0, DC iris	Zoom, f4.3-129mm / F1.6-5.0, DC iris	Zoom, f4.3-129mm / F1.6-5.0, DC iris	Zoom, f4.3-129mm / F1.6-5.0, DC iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC iris	Zoom, f4.7-84.6mm / F1.6-2.8, DC iris
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
Panning and Tilting 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°
Lens 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°
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
Frame Rate vs. Resolution	30 fps at 1280 x 720	30 fps at 1920 x 1080	30 fps at 1280 x 720	30 fps at 1920 x 1080	15 fps at 1920 x 1080 30 fps at 1280 x 720	15 fps at 1920 x 1080 30 fps at 1280 x 720
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	Extreme WDR (107 dB)	Extreme WDR (107 dB)	Extreme WDR (107 dB)	Extreme WDR (107 dB)	Advanced WDR (80 dB)	Advanced WDR (80 dB)
Digital Noise Reduction	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
Digital Input/Output	2/2	2/2	4/2	4/2	2/2	2/2
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC (card not included)	No
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
Environmental Casing	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Weatherproof (IP66); Vandal Proof casing (IK10); Bundled dome cover (IK09); Optional dome cover (IK10)	Weatherproof (IP66); Vandal Proof casing (IK10); Bundled dome cover (IK09); Optional dome cover (IK10)	Vandal Resistant (IK09)	Weatherproof (IP66) Vandal proof (IK10)
Other Value-Added Features	Defogging Advanced Image Stabilizer	Defogging Advanced Image Stabilizer	Defogging Advanced Image Stabilizer	Defogging Advanced Image Stabilizer	Defogging	Defogging
ONVIF Compliant	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
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)
Approvals	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IK09	CE, FCC, IP66, IK10

### Mini PTZ

### Speed Dome



Model	B94	B95	B96	B97	I95	I96	TCM-6630
Maximum Resolution	1.3MP	2MP	5MP	3MP	1MP	2MP	0.35MP (D1)
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	Interlaced Scan CCD
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Superior Low Light Sensitivity	Yes	Yes	No	No	Yes	Yes	No
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 F1.8	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: 0.01 lux at F1.6
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	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, f4.9-49mm / 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, f3.4-122.4mm / F1.6-4.5, DC iris
Zoom Ratio	10x optical	10x optical	10x optical	10x optical	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°-350° Tilt: 0°-180°	Pan: 0°-360° endless Tilt: 0°-180°	Pan: 0°-360° endless Tilt: 0°-180°	Pan: 0°-360° endless Tilt: -10°-190°
Lens Mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	52.1°-5.9°	57.8°-6.9°	49.7°-5.8°	49.6°-5.6°	66.4°-2.68°	66.4°-2.61°	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	H.264 High Profile MJPEG	H.264 MPEG-4 SP MJPEG
Frame Rate vs. Resolution	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 720	30 fps at 1920 x 1080	30 fps at 720 x 480
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (69 dB)	Superior WDR (107 dB)	Extreme WDR (107 dB)	Extreme WDR (107 dB)	Superior WDR
Digital Noise Reduction	DNR	DNR	DNR	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
Digital Input/Output	1/1	1/1	1/1	1/1	4/2	4/2	8/1
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	No
Power Source	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	DC 12V; PoE Class 3	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)	Weatherproof (IP66) Vandal proof (IK10)	Weatherproof (IP66) Vandal proof casing (IK10) Bundled dome cover (IK09) Optional dome cover (IK10)	Weatherproof (IP66) Vandal proof casing (IK10) Bundled dome cover (IK09) Optional dome cover (IK10)	Weatherproof (IP66)
Other Value-Added Features	-	-	-	-	Defogging Advanced Image Stabilizer	Defogging Advanced Image Stabilizer	-
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Starting Temperature	-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	-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	-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)	-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, IP66, NEMA 4X	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66, IK09, NEMA 4X	CE, FCC, IP66

### Indoor Zoom Dome with WDR

### Outdoor Zoom Dome with WDR

### Hemispheric Dome with WDR



Model	B61	B64	B65	B67	KCM-3311	B81	B84	B85	B87	KCM-7311	KCM-3911	KCM-7911
Maximum Resolution	5MP	1.3MP	2MP	3MP	4MP	5MP	1.3MP	2MP	3MP	4MP	4MP	4MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor	Outdoor	Outdoor	Outdoor	Outdoor	Outdoor	Indoor	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	Yes	Yes	No	Yes	No	Yes	Yes	No	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 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 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	Yes	Yes	Yes	Yes
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	No	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	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, f3-9mm / 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, f3-9mm / 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	3x optical	3.6x optical	3x 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: 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: 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	Board mount	Board mount
Horizontal Viewing Angle	85.7°-30.5°	90.6°-31.8°	103.6°-36.2°	84.5°-29.8°	77.2°-22.6°	85.7°-30.5°	90.6°-31.8°	103.6°-36.2°	84.5°-29.8°	77.2°-22.6°	180°	180°
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 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 MPEG-4 SP MJPEG
Frame Rate vs. Resolution	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	8 fps at 2032 x 1920 30 fps at 1280 x 720	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	8 fps at 2032 x 1920 30 fps at 1280 x 720	6 fps at 2032 x 1920 12 fps at 1920 x 1080	6 fps at 2032 x 1920 12 fps at 1920 x 1080
View Mode	-	-	-	-	-	-	-	-	-	-	Fisheye View; Distorted View: 180° / 360° Panorama, ePTZ, 6 VGA, Motion Detection Preset	
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 (69 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Advanced WDR (80 dB)	Basic WDR (69 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Advanced WDR (80 dB)	Advanced WDR (80 dB)	Advanced WDR (80 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	2D+3D DNR	DNR	DNR	DNR	DNR	2D+3D DNR	2D+3D DNR	2D+3D DNR
Audio	2-way	2-way	2-way	2-way	No	2-way	2-way	2-way	2-way	2-way	2-way	2-way
Digital Input/Output	2/2	2/2	2/2	2/2	No	2/2	2/2	2/2	2/2	2/2	2/2	2/2
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	No	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC (card not included)	MicroSDHC (card not included)	MicroSDHC (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	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	DC 12V; PoE Class 3
Environmental Casing	Vandal Resistant (IK09)	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)	Weatherproof (IP66) Vandal proof	No	Weatherproof (IP66)
Other Value-Added Features	-	-	-	-	Defogging	-	-	-	-	Defogging	Defogging	Defogging
ONVIF Compliant	Yes	Yes	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)	-10°C ~ 50°C (14°F ~ 122°F)	-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	-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) 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)	-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)	-10°C ~ 50°C (14°F ~ 122°F)	-40°C ~ 50°C (-22°F ~ 122°F)
Approvals	CE, FCC, IK09	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, IK10, NEMA 4X	CE, FCC, IP66	CE, FCC	CE, FCC, IP66

### Vari-Focal Outdoor Dome

### Vari-Focal Outdoor Dome with WDR



Model	D81	D82	ACM-7411	E81	E82	E83	E84	E85	E86	E88	E89
Maximum Resolution	1MP	3MP	1.3MP	1MP	3MP	5MP	2MP	1MP	3MP	1.3MP	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	No	No	No	Yes	No	No	Yes	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: 0.5 lux, B/W: 0.05 lux at F1.0	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
IR LED	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes (Adaptive)
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f3.3-12mm / F1.6, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f3.1-13.3mm / F1.4, 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: 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
Horizontal Viewing Angle	59.8°-24.7°	70.5°-28.2°	83.0°-23.8°	59.8°-24.7°	70.5°-28.2°	69.2°-28.2°	92.5°-35.9°	60.1°-24.3°	70.5°-28.8°	83.0°-31.1°	100.5°-25.8°
Compression	H.264 High Profile MJPEG	H.264 High Profile MJPEG	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	H.264 High Profile MJPEG
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	8 fps at 1280 x 1024 30 fps at 640 x 480	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	6 fps at 3648 x 2736 30 fps at 1920 x 1080
Multi-Streaming	Dual streams	Dual streams	Single 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 (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)	Basic WDR (65.2 dB)
Digital Noise Reduction	DNR	DNR	No	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	2-way	No	No	No	No	No	No	2-way	2-way
Digital Input/Output	No	No	1/1	No	No	No	No	No	No	1/1	2/2
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	No	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)
Power Source	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	PoE Class 2
Environmental Casing	Weatherproof (IP66) Vandal proof (IK10)	Weatherproof (IP66) Vandal proof (IK10)	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)	Weatherproof (IP66) Vandal proof (IK10)	Weatherproof (IP66) Vandal proof (IK10)	Weatherproof (IP66) Vandal proof (IK10)
ONVIF Compliant	Yes	Yes	No	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)	-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)	-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)	-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	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10	CE, FCC, IP66, IK10, NEMA 4X	CE, FCC, IP66, IK10, NEMA 4X










### Fixed Outdoor Dome

### Fixed Outdoor Dome with WDR



Model	D71	D72	KCM-7111	E71	E72	E73	E74	E75	E76	E77
Maximum Resolution	1MP	3MP	4MP	1MP	3MP	5MP	3MP	1.3MP	2MP	10MP
Application Environment	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
Day / Night	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Superior Low Light Sensitivity	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: 0.05 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
IR LED	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lens	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, 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 / F1.85, Fixed iris	Fixed focal, f3.6mm / F1.85, 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: 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	CS mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	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 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
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	8 fps at 2032 x 1920 30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080
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	No	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (65.2 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	2-way	No	No	No	No	2-way	2-way	2-way
Digital Input/Output	No	No	2/2	No	No	No	No	1/1	1/1	1/1
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)
Power Source	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	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)
ONVIF Compliant	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)	-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)	-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	CE, FCC, IP66	CE, FCC, IP66, IK10	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

**Fixed Indoor Dome with WDR**
**Indoor Fisheye Dome with WDR**
**Vari-Focal Indoor Dome**

	 FULL HD 1080P	 FULL HD 1080P	 FULL HD 1080P			 HD	 FULL HD 1080P	 HD	 FULL HD 1080P
Model	B51	B52	B53	B55	B56	D61	D62	D64	D65
Maximum Resolution	5MP	10MP	3MP	10MP	3MP	1.3MP	2MP	1MP	3MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
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	No	No	Yes	Yes
Superior Low Light Sensitivity	No	No	No	No	No	Yes	Yes	No	No
Minimum Illumination	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.8	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.2	Color: 0.1 lux, B/W: 0 lux (IR LED on) at F2.8	Color: 0.1 lux, B/W: 0.05 lux at F2.0	Color: 0.1 lux, B/W: 0.05 lux at F2.0	Color: 0.1 lux at F1.4	Color: 0.1 lux 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	No	No	Yes	Yes
IR LED	Yes (Adaptive)	Yes (Adaptive)	Yes (Adaptive)	No	No	No	No	Yes	Yes
Lens	Fixed focal, f1.9mm / F2.8 Fixed iris	Fixed focal, f3.6mm / F1.8 Fixed iris	Fixed focal, f1.9mm / F2.8 Fixed iris	Fixed focal, f1.37mm / F2.0 Fixed iris	Fixed focal, f1.19mm / F2.0 Fixed iris	Vari-focal, f2.8-12mm / F1.4 Fixed iris	Vari-focal, f2.8-12mm / F1.4 Fixed iris	Vari-focal, f2.8-12mm / F1.4 Fixed iris	Vari-focal, f2.8-12mm / F1.4 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: 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	Board mount	Board mount	Board mount	Board mount	Board mount	Board mount
Horizontal Viewing Angle	129.56° (overview area) 79.0° (high detail area)	102°	129.56° (overview area) 79.0° (high detail area)	180° (overview area) 109.8° (high detail area)	180° (overview area) 109.8° (high detail area)	83.0°-31.1°	92.5°-35.9°	59.8°-24.7°	70.5°-28.2°
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
Frame Rate vs. Resolution	15 fps at 2592 x 1944 30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	6 fps at 3648 x 2736	15 fps at 2048 x 1536	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080
View Mode	-	-	-	Fisheye View	Fisheye View	-	-	-	-
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	Basic WDR (69 dB)	Basic WDR (65.2 dB)	Superior WDR (107 dB)	Basic WDR (65.2 dB)	Superior WDR (107 dB)	No	No	No	No
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	2-way	2-way	2-way	2-way	2-way	No	No	No	No
Digital Input/Output	1/1	1/1	1/1	1/1	1/1	No	No	No	No
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)
Power Source	DC 12V; PoE Class 2	DC 12V; PoE Class 2	DC 12V; PoE Class 2	DC 12V; PoE Class 2	DC 12V; PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2
Environmental Casing	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	No	No	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)
ONVIF Compliant	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)	-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)
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)
Approvals	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC	CE, FCC	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09

## Vari-Focal Indoor Dome with WDR



Model	E61	E62	E63	E64	E65	E66	E67	E68	E69	E610
Maximum Resolution	1MP	3MP	5MP	1MP	3MP	1.3MP	2MP	1.3MP	2MP	10MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
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	No	No	Yes	Yes	Yes
Superior Low Light Sensitivity	No	No	No	No	No	Yes	Yes	Yes	Yes	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 at F1.4	Color: 0.1 lux 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	No	No	Yes	Yes	Yes
IR LED	Yes	Yes	Yes	Yes	Yes	No	No	Yes	Yes	Yes (Adaptive)
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f3.1-13.3mm / F1.4, 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: 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
Horizontal Viewing Angle	59.8°-24.7°	70.5°-28.2°	69.2°-28.2°	60.1°-24.3°	70.5°-28.8°	83.0°-31.1°	92.5°-35.9°	83.0°-31.1°	92.5°-35.9°	100.5°-25.8°
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
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080
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 (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Superior WDR (107 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (65.2 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	No	No	No	No	No	2-way	2-way	2-way
Digital Input/Output	No	No	No	No	No	No	No	1/1	1/1	2/2
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (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
Environmental Casing	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)	Vandal Resistant (IK09)
ONVIF Compliant	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)	-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)
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 (14°F ~ 122°F)
Approvals	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09	CE, FCC, IK09













### Fixed Indoor Dome

### Fixed Indoor Dome with WDR



Model	D51	D52	D54	D55	TCM-3111	E51	E52	E53	E54	E56	E57	E58	E59
Maximum Resolution	1MP	3MP	1MP	3MP	1.3MP	1MP	1MP	3MP	5MP	3MP	1.3MP	2MP	10MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
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	Progressive Scan CMOS
Day / Night	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Superior Low Light Sensitivity	No	No	No	No	No	No	No	No	No	No	Yes	Yes	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	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: 0.1 lux, B/W: 0 lux (IR LED on) at F1.8	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	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	No	No	Yes	Yes	No	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lens	Fixed focal, f3.6mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Fixed focal, f2.8mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F1.85, Fixed iris	Fixed focal, f3.6mm / F1.85, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris
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°	Pan: 0°-330° Tilt: 0°-180°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°	Pan: 0°-330° Tilt: 20°-90°
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	60.2°	70.8°	60.6°	72.0°	68.2°	77.5°	60.6°	72.0°	72.0°	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 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	H.264 High Profile MJPEG
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	18 fps at 1280 x 1024 30 fps at 640 x 480	30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080
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	Dual streams
Wide Dynamic Range	No	No	No	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (65.2 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	No	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	No	No	No	No	No	No	No	No	No	No	No
Digital Input/Output	No	No	No	No	No	No	No	No	No	No	No	No	No
Local Storage	No	No	No	No	No	No	No	No	No	No	No	No	No
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	PoE Class 2
Environmental Casing	No	No	No	No	No	No	No	No	No	No	No	No	No
ONVIF Compliant	Yes	Yes	Yes	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)	-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 (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)	-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)
Approvals	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC

Model	Indoor Mini Dome			Indoor Mini Dome with WDR						Indoor Mini Fisheye Dome with WDR
	 HD	 FULL HD 1080P	 HD	 HD	 FULL HD 1080P	 FULL HD 1080P	 HD	 FULL HD 1080P	 FULL HD 1080P	
Maximum Resolution	1MP	3MP	1.3MP	1MP	3MP	5MP	1.3MP	2MP	10MP	5MP
Application Environment	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor	Indoor
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	No	No	No	No	No	No	No	No	No	No
Superior Low Light Sensitivity	No	No	No	No	No	No	Yes	Yes	No	No
Minimum Illumination	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.0	Color: 0.5 lux, B/W: 0.5 lux at F1.0	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.0	Color: 0.1 lux at F2.8	Color: 0.1 lux at F1.85	Color: 0.1 lux at F1.85	Color: 0.1 lux at F1.8	Color: 0.1 lux at F2.0
Mechanical IR Cut Filter	No	No	No	No	No	No	No	No	No	No
IR LED	No	No	No	No	No	No	No	No	No	No
Lens	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Fixed focal, f1.9mm / F2.8, Fixed iris	Fixed focal, f3.6mm / F1.85, Fixed iris	Fixed focal, f3.6mm / F1.85, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f1.19mm / F2.0, Fixed iris
Viewing Angle Adjustment	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Pan: ±20° Tilt: 0°-90° Rotate: ±15°	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Pan: ±90° Tilt: 0°-90°	Rotate: ±90°
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	72.0°	83.3°	72.3°	72.0°	83.3°	126.9° (overview area) 77.4° (high detail area)	77.3°	87.5°	101.4°	180° (overview area) 109.8° (high detail area)
Compression	H.264 High Profile MJPEG	H.264 High Profile MJPEG	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
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	8 fps at 1280 x 1024 30 fps at 640 x 480	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080	15 fps at 2592 x 1944
View Mode	-	-	-	-	-	-	-	-	-	Fisheye View
Multi-Streaming	Dual streams	Dual streams	Single streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Basic WDR (65.2 dB)	Basic WDR (69 dB)
Digital Noise Reduction	DNR	DNR	No	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	No	No	No	No	No	No	No	No
Digital Input/Output	No	No	No	No	No	No	No	No	No	No
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	No	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)
Power Source	PoE Class 1	PoE Class 1	PoE Class 3	PoE Class 1	PoE Class 1	PoE Class 1	PoE Class 1	PoE Class 1	PoE Class 1	PoE Class 1
Environmental Casing	Vandal Resistant (IK08)	Vandal Resistant (IK08)	No	Vandal Resistant (IK08)	Vandal Resistant (IK08)	Vandal Resistant (IK08)	Vandal Resistant (IK08)	Vandal Resistant (IK08)	Vandal Resistant (IK08)	Vandal Resistant (IK08)
ONVIF Compliant	Yes	Yes	No	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)	-10°C ~ 40°C (14°F ~ 104°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 ~ 45°C (14°F ~ 113°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 ~ 40°C (14°F ~ 104°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 ~ 45°C (14°F ~ 113°F)	-10°C ~ 50°C (14°F ~ 122°F)
Approvals	CE, FCC, IK08	CE, FCC, IK08	CE, FCC	CE, FCC, IK08	CE, FCC, IK08	CE, FCC, IK08	CE, FCC, IK08	CE, FCC, IK08	CE, FCC, IK08	CE, FCC, IK08

### Zoom Bullet with WDR

### Vari-Focal Bullet with WDR



Model	B41	B44	B45	B47	E41	E41A	E42A	E43A	E44	E45	E46	E47
Maximum Resolution	5MP	1.3MP	2MP	3MP	1MP	1MP	3MP	5MP	2MP	1MP	3MP	1.3MP
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	Yes	Yes	No	No	No	No	No	Yes	No	No	Yes
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 F1.6	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
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	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lens	Zoom, f5.2-62.4mm / 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, f5.2-62.4mm / F1.8-3.0, DC iris	Vari-focal, f3.3-12mm / F1.6, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris
Zoom Ratio	12x optical	10x optical	10x optical	12x optical	-	-	-	-	-	-	-	-
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	48.4°-4.8°	52.1°-5.7°	57.8°-6.9°	50.2°-4.69°	69.8°-19.1°	59.8°-24.7°	70.5°-28.2°	69.2°-28.2°	92.5°-35.9°	60.1°-24.3°	70.5°-28.8°	59.8°-24.7°
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	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
Frame Rate vs. Resolution	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720	30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 960 60 fps at 1280 x 720
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 (69 dB)	Basic WDR (83.5 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	2-way	2-way	2-way	2-way	No	No	No	No	No	No	No	2-way
Digital Input/Output	1/1	1/1	1/1	1/1	No	No	No	No	No	No	No	1/1
Local Storage	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (card not included)	No	No	No	No	No	No	No	MicroSDHC/MicroSDXC (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	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 3
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 (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)
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	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	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-40°C ~ 50°C (-40°F ~ 122°F) within 30 minutes	-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, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	CE, FCC, IP66, NEMA 4X	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, IK10 (metal casing)	CE, FCC, IP66, IK10 (metal casing)	CE, FCC, IP66, NEMA 4X, IK10 (metal casing)

**Vari-Focal Bullet**
**Fixed Bullet with WDR**
**Fixed Bullet**

**HD**

**FULL HD 1080P**

**HD**

**FULL HD 1080P**

**FULL HD 1080P**














**FULL HD 1080P**










**FULL HD 1080P**




**HD**

**FULL HD 1080P**

Model	D41	D42	E31	E32	E33	E34	E37	D31	D32
Maximum Resolution	1MP	3MP	1MP	3MP	5MP	3MP	10MP	1MP	3MP
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
Superior Low Light Sensitivity	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 F1.8	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	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
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
IR LED	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Lens	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Vari-focal, f2.8-12mm / F1.4, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Fixed focal, f3.6mm / F1.85, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Fixed focal, f4.2mm / F1.8, Fixed iris
Lens 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°	55.9°	62.7°	62.7°	68.0°	100.8°	55.9°	62.7°
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	H.264 High Profile MJPEG	H.264 High Profile MJPEG	H.264 High Profile MJPEG	H.264 High Profile MJPEG
Frame Rate vs. Resolution	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2048 x 1536 30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080
Multi-Streaming	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams	Dual streams
Wide Dynamic Range	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Superior WDR (107 dB)	Basic WDR (65.2 dB)	No	No
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR
Audio	No	No	No	No	No	No	No	No	No
Digital Input/Output	No	No	No	No	No	No	No	No	No
Local Storage	No	No	No	No	No	No	MicroSDHC/MicroSDXC (card not included)	No	No
Power Source	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 2	PoE Class 3	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)	Weatherproof (IP66)
ONVIF Compliant	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)
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)
Approvals	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, IK10 (metal casing)	CE, FCC, IP66, NEMA 4X, IK10 (metal casing)	CE, FCC, IP66	CE, FCC, IP66

Model	Box				Box with WDR									
	 HD	 HD	 FULL HD 1080P	 FULL HD 1080P	 HD	 HD	 FULL HD 1080P	 FULL HD 1080P	 FULL HD 1080P	 FULL HD 1080P	 FULL HD 1080P	 HD	 FULL HD 1080P	
	D21F	D21V	D22F	D22V	E21F	E21V	E22F	E22V	E23	E24	E25	E270	E271	
Maximum Resolution	1MP	1MP	5MP	5MP	1MP	1MP	5MP	5MP	2MP	3MP	1.3MP	10MP	10MP	
Application Environment	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/Outdoor	Indoor/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	Progressive Scan CMOS	
Day / Night	Yes	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	No	Yes	No	No	
Minimum Illumination	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F2.0	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F2.0	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F1.4	Color: 0.1 lux, B/W: 0.05 lux at F1.8	Color: 0.1 lux, B/W: 0.05 lux at F1.4	
Mechanical IR Cut Filter	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
IR LED	No	No	No	No	No	No	No	No	No	No	No	No	No	
Lens	Fixed focal, f4.2mm / F1.8, Fixed iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Fixed focal, f4.2mm / F1.8, Fixed iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Fixed focal, f2.93mm / F2.0, Fixed iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Vari-focal, f2.8-12mm / F1.4, DC iris	Fixed focal, f3.6mm / F1.8, Fixed iris	Vari-focal, f3-13mm / F1.4, DC iris	
Lens Mount	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	CS mount (interchangeable lens)	
Horizontal Viewing Angle	53.8°	62.0°-24.8°	81.6°	70.9°-29.2°	53.8°	62.0°-24.8°	81.6°	70.9°-29.2°	88.4°-35.7°	78.1°-26.8°	82.0°-31.1°	101.4°	100.5°-26.2°	
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	H.264 High Profile MJPEG	
Frame Rate vs. Resolution	30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2592 x 1944 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080	30 fps at 1920 x 1080	15 fps at 2048 x 1536 60 fps at 1280 x 720	30 fps at 1280 x 960 60 fps at 1280 x 720	6 fps at 3648 x 2736 30 fps at 1920 x 1080	6 fps at 3648 x 2736 30 fps at 1920 x 1080	
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	Dual streams	
Wide Dynamic Range	No	No	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (72 dB)	Superior WDR (107 dB)	Basic WDR (83.5 dB)	Basic WDR (65.2 dB)	Basic WDR (65.2 dB)	
Digital Noise Reduction	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	DNR	
Audio	No	No	No	No	No	No	No	No	No	No	No	2-way	2-way	
Digital Input/Output	No	No	No	No	No	No	No	No	No	No	No	1/1	1/1	
Local Storage	No	No	No	No	No	No	No	No	No	No	No	MicroSDHC/MicroSDXC (card not included)	MicroSDHC/MicroSDXC (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	PoE Class 2	
Environmental Casing	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	Optional housing (IP66)	
ONVIF Compliant	Yes	Yes	Yes	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)	-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 (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)	-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)	
Approvals	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	CE, FCC	

	Box with Zoom Lens				Cube		Cube with WDR		
									
Model	KCM-5211	KCM-5211E	KCM-5511	KCM-5611	D11	D12	E11	E12	E13
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	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
Superior Low Light Sensitivity	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°	92.6°	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
Frame Rate vs. Resolution	8 fps at 2032 x 1920 30 fps at 1280 x 720	8 fps at 2032 x 1920 30 fps at 1280 x 720	15 fps at 1920 x 1080 30 fps at 1280 x 720	15 fps at 1920 x 1080 30 fps at 1280 x 720	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	30 fps at 1280 x 720	15 fps at 2048 x 1536 30 fps at 1920 x 1080	15 fps at 2592 x 1944 30 fps at 1920 x 1080
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 (80 dB)	Advanced WDR (80 dB)	Advanced WDR	No	No	Basic WDR (69 dB)	Basic WDR (69 dB)	Basic WDR (69 dB)
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
Digital Input/Output	2/2	2/2	2/2	2/2	No	No	No	No	No
Serial Port	No	RS-485, RS-422	RS-485, RS-422	RS-485, RS-422	-	-	-	-	-
Local Storage	MicroSDHC (card not included)	MicroSDHC (card not included)	MicroSDHC (card not included)	MicroSDHC (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
Other Value-Added Features	No	Defogging	Defogging	Defogging	-	-	-	-	-
ONVIF Compliant	Yes	Yes	Yes	Yes	Yes	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	-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

	Video Encoder		Video Decoder	
	1 Channel		1 Channel	16 Channel
				
Model	TCD-2100		ACD-3100	ECD-1000
Compression	H.264, MPEG-4 SP, MJPEG		MPEG-4 SP, MPEG-4 ASP	H.264
Frame Rate vs. Resolution	30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL)		30 fps at 720 x 480 (NTSC) 25 fps at 720 x 576 (PAL)	30 fps at 1920 x 1080 25 fps at 720 x 576
Multi-Streaming	Dual streams		-	-
Audio	No		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
Network Connector	RJ-45		RJ-45	RJ-45
Analog Video Input	BNC x 1		-	-
Analog Video Output	No		BNC x 1; S-Video x 1	1, BNC
HDMI Output	-		No	1, HDMI Type A
Digital Input/Output	1/1		2/2	No
Serial Port	RS-485, RS-422, RS-232		RS-485, RS-422, RS-232	No
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), Mobile Client (iOS & Android)		Web Client (IE)	Web Client (IE), Mobile Client (iOS & Android)
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 9, IE 10		IE 6, IE 7, IE 8	IE 9, IE 10
ONVIF Compliant	Yes		No	No
Starting Temperature	-10°C ~ 50°C (14°F ~ 122°F)		0°C ~ 50°C (32°F ~ 122°F)	0°C ~ 50°C (32°F ~ 122°F)
Operating Temperature	-10°C ~ 50°C (14°F ~ 122°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 Standalone NVR



Model	ENR-1000	ENR-1100	ENR-1200	ENR-2000	GNR-3000	INR-410	INR-420
Maximum Number of Cameras	4	9	16	16	64	200	200
Maximum Number of Clients	1 local, 2 remote	1 local, 2 remote	1 local, 2 remote	1 local, 2 remote	1 local, 4 remote	1 local, 3 remote	1 local, 3 remote
Free License	4	9	16	16	32	64	64
Video Resolution	Up to 2-Megapixel (Local display) Up to 10-Megapixel (Remote display)	Up to 2-Megapixel (Local display) Up to 10-Megapixel (Remote display)	Up to 2-Megapixel (Local display) Up to 10-Megapixel (Remote display)	Up to 2-Megapixel (Local display) Up to 10-Megapixel (Remote display)	Support all ACTI cameras in all resolutions	Support all ACTI cameras in all resolutions	Support all ACTI cameras in all resolutions
Compression	H.264	H.264	H.264	H.264	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG	H.264, MPEG-4, MJPEG
Multi-Streaming	No	No	No	No	Dual streams	Dual streams	Dual streams
Scheduled Recording	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Event Recording	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Manual Recording	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Speed Up	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Dual Stream Management	No	No	No	No	Yes	Yes	Yes
Recording Throughput	4 channels at 1080p/30fps	9 channels at 1080p/30fps	16 channels at 1080p/30fps	16 channels at 1080p/30fps	Maximum total bitrate 300 Mbps	Maximum total bitrate 300 Mbps	Maximum total bitrate 300 Mbps
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)	Maximum 8 SATA disks (1 system disk included)	Maximum 8 SATA disks (1 system disk included)
External Storage Interface	No	No	No	No	eSATA, iSCSI, USB	eSATA, iSCSI, USB	eSATA, iSCSI, USB
RAID Level	No	No	No	No	Software RAID 0, 1	Software RAID 0, 1	Hardware RAID 0, 1, 5, 10
Display Layout Mode	Local: 1, 2, 4 Remote: 1, 2, 4	Local: 1, 2, 4, 9, 1+5, 1+7, 2+4 Remote: 1, 2, 4, 9, 1+5, 1+7, 2+4	Local: 1, 2, 4, 9, 12, 16, 1+5, 1+7, 1+12, 2+4, 2+8 Remote: 1, 2, 4, 9, 12, 16, 1+5, 1+7, 1+12, 2+4, 2+8	Local: 1, 2, 4, 9, 12, 16, 1+5, 1+7, 1+12, 2+4, 2+8 Remote: 1, 2, 4, 9, 12, 16, 1+5, 1+7, 1+12, 2+4, 2+8	Local: 1, 4, 5, 6, 8, 9, 10, 12, 16, Custom Remote: 1, 4, 5, 6, 8, 9, 10, 12, 16, 18, 24, 25, 35, 36, 48, 49, 64, Custom	Local: 1, 4, 6, 8, 9, 10, 12, 16, Custom Remote: 1, 4, 9, 16, 25, 36, 49, 64, Custom	Local: 1, 4, 6, 8, 9, 10, 12, 16, Custom Remote: 1, 4, 9, 16, 25, 36, 49, 64, Custom
Digital Zoom	Yes	Yes	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	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 (Remote client)	Instant Playback in live view window (Remote client)	Instant Playback in live view window (Remote client)	Instant Playback in live view window (Remote client)	Instant Playback in live view window	Instant Playback in live view window	Instant Playback in live view window
e-Map	No	No	No	No	Yes	Yes	Yes
PTZ Control	Yes	Yes	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	Continuous 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	9 channels	16 channels	16 channels	9 channels (local), 64 channels (remote)	9 channels (local), 64 channels (remote)	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	HDMI & VGA port for monitor, USB joystick, keyboard & mouse	HDMI & VGA port for monitor, USB joystick, keyboard & mouse
Remote Access	Web Client (IE), Mobile Client (iOS & Android)	Web Client (IE), Mobile Client (iOS & Android)	Web Client (IE), Mobile Client (iOS & Android)	Web Client (IE), Mobile Client (iOS & Android)	Workstation, Web Client (IE), Mobile Client (iOS & Android)	Workstation, Web Client (IE), Mobile Client (iOS & Android)	Workstation, Web Client (IE), Mobile Client (iOS & Android)
Event Trigger	Video motion detection; External device through digital input; Network loss and recovery; System-hard disk error	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	Video motion detection; Passive IR sensor; External device through digital input; Video loss and recovery; Network loss and recovery; Server 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
Event Response	Record video; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Beep; Digital output; E-mail with snapshots; Event logging; Go to PTZ preset point	Record video; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point	Record video; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point	Record video; Beep; Digital output; Snapshot to FTP; Execute system command; E-mail with snapshots; Go to PTZ preset point
Permission Control	Unlimited number of users, Customizable permissions for user groups	Unlimited number of users, Customizable permissions for user groups	Unlimited number of users, Customizable permissions for user groups	Unlimited number of users, 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
ONVIF Compliant	No	No	No	No	Yes (NVR3 v3.0.08 or newer version)	Yes (NVR3 v3.0.08 or newer version)	Yes (NVR3 v3.0.08 or newer version)
Video Export	USB	USB	USB	USB	eSATA, iSCSI, USB	eSATA, iSCSI, USB	eSATA, iSCSI, USB
Server Operating System	Embedded Linux	Embedded Linux	Embedded Linux	Embedded Linux	Embedded Windows 7	Embedded Windows 7	Embedded Windows 7
Client PC Operating System	Windows 8, Windows 7	Windows 8, Windows 7	Windows 8, Windows 7	Windows 8, Windows 7	Windows 8, Windows 7, Windows Server 2012	Windows 8, Windows 7, Windows Server 2012	Windows 8, Windows 7, Windows Server 2012
PC Web Browser	IE 9, IE 10, IE 11	IE 9, IE 10, IE 11	IE 9, IE 10, IE 11	IE 9, IE 10, IE 11	IE 8, IE 9, IE 10	IE 8, IE 9, IE 10	IE 8, IE 9, IE 10
ONVIF Compliant	No	No	No	No	Yes	Yes	Yes
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)	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	CE/FCC	CE/FCC



## Video Management System

Model	Software NVR			Central Management System	
	 NVR 2.3 Ent	 NVR 2.3 Pro	 NVR 3.0	 CMS 1.0 *	 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	No	No	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	No	No	Instant Playback in live view window	No	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	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; Audio alert; 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; Switch view; Send view to TV Wall
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 NVR3 v3.0.08 or newer version)

\* Fully compatible with ACTi cameras, encoders and NVR Enterprise 2.3

\*\* Fully compatible with ACTi cameras, encoders, NVR 3.0 and standalone NVRs.

# 2014 Product Roadmap Matrix

## D/E Series

Product Type		Cube		Box				Bullet				Mini Dome			Dome						Mini Fisheye Dome				
																									
Application Environment		Indoor		Indoor/Outdoor				Outdoor				Indoor		Outdoor	Indoor			Outdoor			Indoor	Outdoor			
Lens		Fixed focal		Fixed focal		Vari-focal		Fixed focal		Vari-focal		Fixed focal	Fixed focal	Fixed focal		Vari-focal		Fixed focal		Vari-focal		Fixed focal	Fixed focal		
Product Platform		D1x	E1x	D2x	E2x	D2x	E2x	D3x	E3x	D4x	E4x	D9x	E9x	E9x	D5x	E5x	D6x	E6x	D7x	E7x	D8x	E8x	E9x	E9x	
Day Only	Standard	1MP	D11	E11									D91	E91		D51	E51								
		3MP	D12	E12										D92	E92		D52								
		5MP		E13										E93	E920 E920M									E96	E921 E921M
		10MP		E14										E97	E922 E922M										E923 E923M
	Super Low Light	1.3MP												E94				D61	E66						
		2MP												E95				D62	E67						
	Complicated Light	3MP													E918 E918M										E919 E919M
Day & Night	Standard	1MP			D21F	E21F	D21V	E21V	D31	E31	D41	E41 E41A				D54	E52	D64	E61	D71	E71	D81	E81		
		3MP							D32	E32	D42	E42A				D55	E53	D65	E62	D72	E72	D82	E82		
		5MP			D22F	E22F	D22V	E22V		E33		E43A				E54		E63		E73		E83			
		10MP				E270		E271		E37		E48				E59		E610		E77		E89			
	Super Low Light	1.3MP						E25				E47				E57		E68		E75		E88			
		2MP						E23				E44				E58		E69		E76		E84			
	Complicated Light	1MP										E45						E64				E85			
		3MP						E24		E34		E46				E56		E65		E74		E86			











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Available in Q2, 2014

The availability information here is for reference only. Please visit our website at [www.acti.com](http://www.acti.com) for the latest information.

# 2014 Product Roadmap Matrix

## B/I Series














Product Type		Zoom Box	Zoom Bullet	Dome	Zoom Dome		Fisheye Dome	Hemispheric Dome		Mini PTZ	PTZ		Speed Dome		
															
Application Environment		Indoor/Outdoor	Outdoor	Indoor	Indoor	Outdoor	Indoor	Indoor	Outdoor	Outdoor	Indoor	Outdoor	Outdoor		
Lens		Zoom	Zoom	Fixed focal	Zoom	Zoom	Fixed focal	Fixed focal	Fixed focal	Zoom	Zoom	Zoom	Zoom		
Product Platform		<b>B2x</b>	<b>B4x</b>	<b>B5x</b>	<b>B6x</b>	<b>B8x</b>	<b>I8x</b>	<b>B5x</b>	<b>I5x</b>	<b>I7x</b>	<b>B9x</b>	<b>I9x</b>	<b>I9x</b>	<b>I9x</b>	
Day & Night	Standard	5MP	B21 (12x)	B41 (12x)	B51	B61 (3x)	B81 (3x)				B96 (10x)				
		10MP			B52				B55						
	Super Low Light	1.3MP	B24 (10x)	B44 (10x)		B64 (3x)	B84 (3x)					B94 (10x)			
		2MP	B25 (10x)	B45 (10x)		B65 (3x)	B85 (3x)					B95 (10x)			
	Complicated Light	3MP	B27 (12x)	B47 (12x)	B53	B67 (3x)	B87 (3x)		B56		B97 (10x)				
	Complicated Light + Super Low Light	1MP						I84 (10x)					I91 (30x)	I93 (30x)	I95 (30x)
		2MP						I85 (10x)					I92 (30x)	I94 (30x)	I96 (30x)
		5MP								I51	I71				

Available Now

Available in Q2, 2014

The availability information here is for reference only. Please visit our website at [www.acti.com](http://www.acti.com) for the latest information.

# Mounting Accessory Matrix

Camera Type	Camera Installation Series		Example Models	Target Surface	Mounting Method														
					Surface	Rough Surface	Flush	Gang Box	Pendant	Tilted Mount	Accessory Set*	By L-Bracket	By Bracket	By Integrated Bracket	1.5" NPT Third Party Solution				
Cube	Cube		D1x, E1x	Ceiling										Y					
				Wall											Y				
Box	Indoor Box		D2xx, E2x, E2xx, KCM-5211	Ceiling										Y					
				Wall										Y					
				Pole									Y (w/ Housing)						
	Outdoor-Ready Box		KCM-5211E, KCM-5511, KCM-5611	Wall										Y					
				Pole							Y			Y					
Bullet	Bullet with Bundled Removable Bracket		D3x, D4x, E3x, E47, E41x ~ E43x	Ceiling											Y				
				Wall										Y		Y			
				Pole										Y					
	Bullet with Integrated Bracket		B4x, E44 ~ E46	Ceiling					Y							Y (B4x only)	Y		
				Wall					Y									Y	
				Pole										Y					
Dome	Mini Dome & Mini Fisheye Dome		D9x, E9x, ACM-3701E	Ceiling	Y				Y										
				Wall	Y				Y										
	Indoor Dome		B5x, D5x, E5x B6x, D6x, E6x KCM-3311, TCM-3111	Ceiling	Y			Y	Y	Y					Y			Y	
				Wall	Y				Y				Y		Y				
				Pole								Y							
				Corner										Y					
	Outdoor Dome		D7x, D8x, E7x, E8x, B8x, ACM-7411, KCM-7111, KCM-7311	Ceiling	Y			Y	Y	Y								Y	
				Wall									Y		Y				
				Pole								Y		Y					
				Corner										Y					
	Indoor Hemispheric & Fisheye Dome		B55, B56, KCM-3911	Ceiling	Y			Y	Y	Y								Y	
				Wall								Y	Y						
				Pole								Y	Y						
				Corner									Y	Y					
	Outdoor Hemispheric & Fisheye Dome		KCM-7911	Ceiling	Y	Y			Y										
Wall											Y								
Pole												Y							
Corner													Y						
PTZ	Outdoor Mini PTZ		B94, B95, B96, B97	Ceiling	Y			Y	Y								Y		
				Wall									Y		Y				
				Pole								Y							
				Corner										Y					
				Rooftop / Parapet															
	Indoor PTZ		I91, I92, KCM-8111	Ceiling	Y			Y	Y									Y	
				Wall									Y		Y				
				Pole								Y							
				Corner										Y					
	Outdoor PTZ & Speed Dome		I93 ~ I96, KCM-8211, TCM-6630	Ceiling						Y								Y	
				Wall										Y					
				Pole								Y		Y					
Corner													Y						
Rooftop / Parapet																			

\* Accessory Set refers to combinations of the different mounting accessories, such as pole mount with straight tube and mount kit, etc..

## Popular Mounting Accessory Sets

		Ceiling		Wall		Pole		Corner	
Dome		<b>PMAX-10xx</b> Flush Mount 	<b>SMAX-0150</b> Heavy Duty Wall Mount and Mount Kit 	<b>SMAX-0144</b> Pole Mount with Heavy Duty and Mount Kit 	<b>SMAX-0041</b> Corner Mount with Heavy Duty and Mount Kit 				
		<b>SMAX-0053</b> Pendant Mount with Bracket and Mount Kit 	<b>SMAX-0089</b> Junction Box with Heavy Duty Wall Mount and Mount Kit 	<b>SMAX-0134</b> Pole Mount with Junction Box, Heavy Duty and Mount Kit 	<b>SMAX-0031</b> Corner Mount with Junction Box, Heavy Duty and Mount Kit 				
PTZ	Outdoor	<b>SMAX-0067</b> Junction Box with Pendant Mount 	<b>SMAX-0083</b> Junction Box with Heavy Duty Wall Mount 	<b>SMAX-0096</b> Pole Mount with Pendant Mount 	<b>SMAX-0035</b> Corner Mount with Heavy Duty 				
	Indoor	<b>SMAX-0054</b> Pendant Mount with Mount Kit 	<b>SMAX-0151</b> Heavy Duty Wall Mount with Mount Kit 	<b>SMAX-0145</b> Pole Mount with Heavy Duty and Mount Kit 	<b>SMAX-0042</b> Corner Mount with Heavy Duty and Mount Kit 				
Bullet		<b>PMAX-1300</b> Ceiling Bracket 	<b>PMAX-0806</b> Gangbox Converter 	<b>SMAX-0092</b> Pole Mount with Mounting Bracket 	<b>SMAX-0005</b> Corner Mount with Mounting Bracket 				
Box		<b>PMAX-1104</b> Bracket 	<b>SMAX-0001</b> Wall Mount Bracket with Housing 	<b>SMAX-0093</b> Pole Mount with Mounting Bracket and Housing 	<b>SMAX-0006</b> Corner Mount with Mounting Bracket and Housing 				

These are some of the most commonly used accessory sets. Please visit <http://www.acti.com/mountingselector> for more mounting accessory solutions.

## Optional Lenses

										
Model	<b>PLEN-0101</b>	<b>PLEN-0114</b>	<b>PLEN-0119</b>	<b>PLEN-0121</b>	<b>PLEN-0127</b>	<b>PLEN-0130</b>	<b>PLEN-0131</b>	<b>PLEN-0205</b>	<b>PLEN-4103</b>	<b>PLEN-4104</b>
Product Type	Fixed Lens	Fixed Lens	Fixed Lens	Fixed Lens	Vari-focal Lens	Fixed Lens	Vari-focal Lens	Vari-focal Lens	Fixed Lens	Fixed Lens
Day / Night	Yes	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes	Yes
Lens Mount	CS Mount	Board Mount	CS Mount	Board Mount	CS Mount	CS Mount	CS Mount	C Mount (C to CS adapter included)	Board Mount	Board Mount
Focal Length	Fixed focal, f4.2mm	Fixed focal, f4.2mm	Fixed focal, f2.8mm	Fixed focal, f2.8mm	Vari-focal, f2.8-12mm	Fixed focal, f2.93mm	Vari-focal, f3.3-9mm	Vari-focal, f8-80mm	Fixed focal, f8.0mm	Fixed focal, f6.0mm
Iris	Fixed iris, F1.8	Fixed iris, F1.8	Fixed iris, F2.0	Fixed iris, F2.0	DC iris, F1.4	Fixed iris, F2.0	Fixed iris, F1.4	DC iris, F1.6	Fixed iris, F1.8	Fixed iris, F1.8
Focus	Manual focus	Fixed focus (adjustable back focus)	Manual focus	Fixed focus (adjustable back focus)	Manual focus	Manual focus	Manual focus	Manual focus	Fixed focus (adjustable back focus)	Fixed focus (adjustable back focus)
Supported Models	D22F D22V E12 E13 E22F	D91 D92 E91 E92	D21F D21V E11 E21F	TCM-3111	D21F D21V D22F D22V E21F E22F	D21F D21V E21F	E11 E12 E13	D21F D21V D22F E21F E23 E24 E25	D91 D92 E91 E92	D91 D92 E91 E92

## Optional Dome Covers

														
Model	<b>PDCX-0001</b>	<b>PDCX-0101</b>	<b>PDCX-0103</b>	<b>PDCX-0104</b>	<b>PDCX-0105</b>	<b>PDCX-1001</b>	<b>PDCX-1005</b>	<b>PDCX-1101</b>	<b>PDCX-1102</b>	<b>PDCX-1105</b>	<b>PDCX-1106</b>	<b>PDCX-1107</b>	<b>PDCX-1108</b>	<b>PDCX-1109</b>
Product Type	Transparent Cover	Smoked Cover	Smoked Cover	Smoked Cover	Smoked Cover	Transparent Cover	Transparent Cover	Smoked Cover	Smoked Cover	Smoked Cover	Smoked Cover	Smoked Cover	Smoked Cover	Smoked Cover
Description	Transparent Dome Cover for TCM-6630	3-inch Smoked Dome Cover	Smoked Dome Cover for TCM-6630	3-inch Smoked Dome Cover	3-inch Smoked Dome Cover	Transparent Dome Cover for TCM-6630	Transparent Dome Cover for I93, I94, I95, I96	4-inch Smoked Dome Cover	2-inch Smoked Dome Cover with casing for ACM-3701E	Indoor PTZ Smoked Dome Cover	2-inch Smoked Dome Cover	Smoked Dome Cover for KCM-8211	Smoked Dome Cover for I93, I94, I95, I96	Smoked Dome Cover for DE6X/7X/B6X/B8X/B9X
Material	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic	Plastic/Aluminum	Plastic	Plastic	Plastic/Aluminum	Plastic	Plastic/Aluminum	Plastic/Aluminum	Plastic
Dimension	145 mm (5.71")	96 mm (3.78")	145 mm (5.71")	96 mm (3.78")	96 mm (3.78")	145 mm (5.71")	188 x 127 mm (7.4" x 5")	107.8 mm (4.25")	100 mm (3.94")	134 x 77 mm (5.28" x 3.03")	54 mm (2.13")	180 x 120 mm (7" x 4.7")	188 x 127 mm (7.4" x 5")	107.8 mm (4.25")
Weight	0.625kg (1.38lb)	0.23kg (0.51lb)	0.625kg (1.38lb)	0.52kg (1.15lb)	0.49kg (1.08lb)	0.64kg (1.41lb)	0.36 kg (0.79 lb)	0.26kg (0.57lb)	0.132kg (0.29lb)	0.2kg (0.45lb)	0.012kg (0.03lb)	1kg (2.25lb)	0.36 kg (0.79 lb)	0.26 kg (0.57 lb)
Durability	Standard	Standard	Standard	Standard	Standard	Vandal Proof (IK10)	Vandal Proof (IK10)	Vandal Proof (IK10)	Standard	Vandal Resistant (IK09)	Vandal Resistant (IK08)	Vandal Proof (IK10)	Vandal Proof (IK10)	Vandal Proof (IK10)
Dome Cover Transparency	Transparent	Smoke	Smoke	Smoke	Smoke	Transparent	Transparent	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke	Smoke
Supported Models	TCM-6630	TCM-3111	TCM-6630	D51 D52 D54 D55 E51	E52 E53 E54 E56 E57 E58 E59	TCM-6630	I93 I94 I95 I96	ACM-7411 B51 B52 B53 D61 D62 D64 D65 D71 D72 D81 D82 E61 E62 E63 E64 E65 E66	ACM-3701E	I91 I92 KCM-8111	D91 D92 E91 E92 E93 E94 E95 E96 E97	KCM-8211	I93 I94 I95 I96	B61 B64 B67 B81 B84 B87 B94 B95 B96





## Power Supply Accessories

						
Model	<b>PPBX-0002</b>	<b>PPOE-0000</b>	<b>PPOE-0001</b>	<b>PPOE-0101</b>	<b>PPOE-0102</b>	<b>PPOE-4000</b>
Product Type	Power Adapter	PoE Injector	PoE Injector	PoE Injector	PoE Injector	PoE Injector
Description	AC 100-240V to DC 12V power adapter	IEEE802.3af PoE Injector for Class 1, 2 or 3 devices	IEEE802.3af PoE Injector for Class 1, 2 or 3 devices	High PoE injector	High PoE injector	IEEE802.3af PoE Injector for Class 1, 2 or 3 devices
Power Connector Type	Universal	US/Japan	Universal	Universal	Universal	Australia
Supported Models	All the DC 12V powered devices	All the PoE class 1, 2 and 3 devices	All the PoE class 1, 2 and 3 devices	I91 I92 KCM-8111	I93 I94 I95 I96 KCM-8211	All the PoE class 1, 2 and 3 devices





## Standalone NVR Accessories

		
Model	<b>PMAx-1200</b>	<b>PMAx-1201</b>
Product Type	Standalone NVR Mount	Standalone NVR Mount
Description	19" sliding rail for rack mounting of Rackmount Standalone NVR (INR-410, INR-420)	26" sliding rail for rack mounting of Rackmount Standalone NVR (INR-410, INR-420)
Supported Models	INR-410 INR-420	INR-410 INR-420



## Video Encoder/Decoder Accessories

		
Model	<b>RMK-2000</b>	<b>RMK-3000</b>
Product Type	Video Encoder Mount	Video Encoder Mount
Description	4U Rackmount kit for video encoders/decoders, 8 slots	4U Rackmount kit for video encoders/decoders, 8 slots
Fan	Yes, 1 per slot	No
Supported Models	TCD-2100 ACD-3100	TCD-2100 ACD-3100

## ACTi Corporation

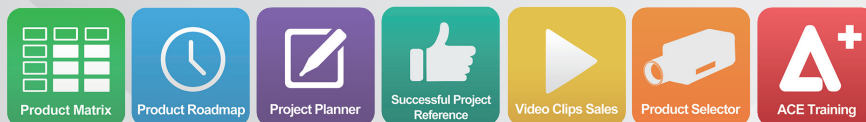
As the technology leader in IP surveillance, ACTi not only provides IP cameras but also develops and offers NVR recording platforms in both Software or Hardware versions. Integrators also have the freedom to use ACTi IP cameras with many VMS solutions on the market, or utilize a unified ACTi solution (cameras + recording platform) as well. ACTi offers a complete range of IP cameras in 1~10 Megapixel resolutions. All cameras include an ISP designed and manufactured by ACTi with many different lens options available. Be assured that the video is always clear and the focus is always precise, even in low light applications. Excellent quality video anytime and anywhere by ACTi!

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