

# Surveillance cameras



*Product line card*

# Surveillance cameras

Box | Box zoom



## Koh Samui, Thailand

Praised for its breathtaking beaches, delightful holiday resorts and densely forested interior, Koh Samui has quickly become one of Thailand's most popular tourist destinations. In an effort to create a safe environment for the growing number of people visiting the island, Koh Samui invested in a multipurpose video surveillance network.

## Other product groups



Explosion-proof cameras



Video over fiber



Video encoders



Network equipment



Video management



Model	Box										Box zoom	
	BC820v2	BC822	BC822A	BC822A-HSE	BC860	BC1103-2	BC880	BC840-PID	BC840-MC	BC840-PID-XT	BC822H2	BC820v2H3
Image sensor	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.9" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.7" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS
Lens	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	C/CS Mount	Motorised 18x optical zoom 4.7 - 85 mm, F1.6	Motorised 30x optical zoom 4.3 - 129 mm, F1.6
Focus	Auto back focus	-	Auto back focus	Auto back focus	Auto back focus	Auto back focus	Auto back focus	-	-	-	Autofocus	Push to focus
Horizontal FOV	-	-	-	-	-	-	-	-	-	-	55.2° - 3.2°	67.4° - 2.6°
Day/night (ICR)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Supported encoding type	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, H.264i, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MPEG-4, MPEG-2, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Multistreaming	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Max resolution	1920x1080 @60 fps	1920x1080 @60 fps	1920x1080 @60 fps	1980x1080 @60 fps	2048x1536 @30 fps	2048x1536 @45 fps 1920x1080 @60 fps	3840x2160 @30 fps	1920x1080 @30 fps	1920x1080 @30 fps	1920x1080 @30 fps	1980x1080 @60 fps	2048x1536 @60 fps
Light sensitivity (30 IRE)	0.04 lux colour 0.002 lux B/W	0.01 lux colour 0.001 lux B/W	0.01 lux colour 0.001 lux B/W	0.01 lux colour 0.0005 lux B/W	0.2 lux colour 0.02 lux B/W	0.05 lux colour 0.005 lux B/W	0.2 lux colour 0.02 lux B/W	0.1 lux colour 0.01 lux B/W	0.1 lux colour 0.01 lux B/W	0.1 lux colour 0.01 lux B/W	0.05 lux colour 0.004 lux B/W (IR50)	0.04 lux colour 0.002 lux B/W
IR illuminator	-	-	-	-	-	-	-	-	-	-	-	-
Video enhancements	120 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	72 dB WDR, BLC, 3DNR	70 dB WDR, BLC, 3DNR	70 dB WDR, BLC, 3DNR	70 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR
Alarm inputs/outputs	2/1	1/1	1/1	1/1	1/1	1/1	1/1	2/2	2/2	2/2	1/1	1/1
Analog video output	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC
Audio	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way
Integration protocols	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S, CGI	ONVIF Profile S, OSA (HTTP API), NTCIP	ONVIF Profile S, OSA (HTTP API), NTCIP	ONVIF Profile S, OSA (HTTP API), NTCIP	ONVIF Profile S, CGI	ONVIF Profile S, CGI
PTZ range	-	-	-	-	-	-	-	-	-	-	-	-
Auto tracking	-	-	-	-	-	-	-	-	-	-	-	-
Video analytics	Basic	Basic	Basic	Basic	Basic	Intelligent	Basic	PID	Basic	PID	Basic	Basic
Privacy masks	5	5	5	5	5	4	5	10	10	10	5	5
Security	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering, Watermark	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS	Password protected, HTTPS	Password protected, HTTPS	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering
Micro SD support	64 GB	128 GB	128 GB	128 GB	128 GB	128 GB	128 GB	32 GB	32 GB	32 GB	128 GB	64 GB
SFP interface	-	-	-	-	-	-	-	Optional	Optional	Optional	-	-
Ingress protection	-	-	-	-	-	-	-	-	-	-	-	-
Vandal proof	-	-	-	-	-	-	-	-	-	-	-	-
UL/UR Listed	-	-	-	-	-	✓	-	-	-	-	-	✓
Power consumption	4 W	4 W	9.5 W	8 W	4 W	6 W	11 W	7 W	7 W	7 W	9 W	8 W
Power	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)
Operating temperature	-20 °C to +55 °C -4 °F to +130 °F	-10 °C to +60 °C 14 °F to 140 °F	-20 °C to +60 °C -4 °F to 140 °F	-10 °C to +50 °C 14 °F to +122 °F	-20 °C to +60 °C -4 °F to 140 °F	-30 °C to +60 °C -22 °F to +140 °F	-10 °C to +50 °C 14 °F to +122 °F	-30 °C to +50 °C -22 °F to +122 °F	-30 °C to +50 °C -22 °F to +122 °F	-40 °C to +75 °C -40 °F to +167 °F	-10 °C to +55 °C 14 °F to +130 °F	-10 °C to +50 °C +14 °F to +122 °F
Dimensions	75 x 52 x 155 mm 3.0 x 2.1 x 6.1 in	76 x 53 x 126 mm 3.0 x 2.1 x 5.0 in	76 x 52 x 152 mm 3.0 x 2.1 x 6.0 in	76 x 52 x 152 mm 3.0 x 2.1 x 6.0 in	76 x 52 x 152 mm 3.0 x 2.1 x 6.0 in	70 x 60 x 145 mm 2.8 x 2.4 x 5.7 in	76 x 52 x 152 mm 3.0 x 2.1 x 6.0 in	64 x 64 x 150 mm 2.5 x 2.5 x 5.9 in	64 x 64 x 150 mm 2.5 x 2.5 x 5.9 in	74 x 64 x 148 mm 2.9 x 2.5 x 5.8 in	81 x 53 x 184 mm 3.2 x 2.1 x 7.2 in	80 x 52 x 183 mm 3.2 x 2.1 x 7.2 in

# Surveillance cameras

## Bullet



### Ritz Carlton Hotel, Dubai

The Dubai Ritz Carlton Hotel puts up a challenging tender for a complete overhaul, upgrade and extension of its existing analog based CCTV system to monitor overall security inside and outside the hotel area.

Advanced access control and number plate recognition for entering and leaving the parking areas was also included in the tender. The security systems needed to be integrated into a single Security Management Software system.

### Other product groups



Explosion-proof cameras



Video over fiber



Video encoders



Network equipment



Video management



	Bullet										
Model	BL1004F4-EI	BL1004V1-EI-A	BL1004M1-EI-A	BL1004M1-EI	BL820v2M1IR	BL822M1IR	BL860M2IR	BL860Z1IR	BL1103M1-EI	BL1102M2-EI-HSE	BL880M1IR
Image sensor	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.8" CMOS	1/1.7" CMOS
Lens	Fixed 4.0 mm, F2.0	Varifocal 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 3x optical zoom 3.0 - 9.0 mm, F1.7	Motorised 2.4x optical zoom 3.3 - 8.0 mm, F1.5	Motorised 2.4x optical zoom 9.0 - 22 mm, F1.6	Motorised 3x optical zoom 3.0 - 9.0 mm, F1.7	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4x optical zoom 8.0 - 32 mm, F1.2	Motorised 2.3x optical zoom 3.5 - 8.0 mm, F1.4
Focus	Fixed focus	Manual focus	Push to focus	Push to focus	Push to focus	Push to focus	Push to focus	Autofocus	Autofocus	Autofocus	Push to focus
Horizontal FOV	83.0°	112° - 33.8°	112° - 33.8°	112° - 33.8°	109° - 33°	115° - 56°	33° - 14°	107° - 38°	94.5° - 30.5°	31.0° - 10.0°	116° - 52°
Day/night (ICR)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Supported encoding type	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, MJPEG
Multistreaming	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Max resolution	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1512 @15 fps 1920x1080 @60 fps	1920x1080 @60 fps	2048x1536 @30 fps 1920x1080 @60 fps	2048x1536 @30 fps 1920x1080 @60 fps	2048x1536 @45 fps 1920x1080 @60 fps	1980x1080 @60 fps	3840x2160 @30 fps 1920x1080 @60 fps
Light sensitivity (30 IRE)	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.04 lux colour 0.002 lux B/W 0 lux with IR	0.01 lux colour 0.001 lux B/W 0 lux with IR	0.08 lux colour 0.004 lux B/W 0 lux with IR	0.04 lux colour 0.002 lux B/W 0 lux with IR	0.05 lux colour, 0.005 lux B/W 0 lux with IR	0.005 lux colour 0.002 lux B/W 0 lux with IR	0.04 lux colour, 0.002 lux B/W 0 lux with IR
IR illuminator	850 nm, 30 m	850 nm, 30 m	850 nm, 30 m	850 nm, 30 m	850 nm, 40 m	850 nm, 30 m	850 nm, 50 m	850 nm, 50 m	850 nm, 50 m	850 nm, 100 m	850 nm, 50 m
Video enhancements	120 dB WDR, 3DNR	120 dB WDR, 3DNR	120 dB WDR, 3DNR	120 dB WDR, 3DNR	120 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	120 dB WDR, 3DNR, BLC, ROI, Defog, EIS	72 dB WDR, BLC, 3DNR
Alarm inputs/outputs	-	-	-	1/1	2/1	1/1	1/1	1/1	1/1	1/1	1/1
Analog video output	-	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC
Audio	-	-	-	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way
Integration protocols	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S, CGI
PTZ range	-	-	-	-	-	-	-	-	-	-	-
Auto tracking	-	-	-	-	-	-	-	-	-	-	-
Video analytics	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Intelligent	Intelligent	Basic
Privacy masks	4	4	4	4	5	5	5	5	4	4	5
Security	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering
Micro SD support	-	128 GB	128 GB	128 GB	64 GB	128 GB	128 GB	128 GB	128 GB	128 GB	128 GB
SFP interface	-	-	-	-	-	-	-	-	-	-	-
Ingress protection	IP66	IP67	IP67	IP67	IP67	IP66	IP66	IP66	IP67	IP67	IP66
Vandal proof	-	-	-	-	IK10	IK10	IK10	IK10	-	-	IK10
UL/UR Listed	✓	✓	✓	✓	-	-	-	-	✓	-	-
Power consumption	5 W	7.5 W	7.5 W	7.5 W	12.3 W	10 W	13.4 W	13.4 W	12 W	20.7 W	15.5 W
Power	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12 Vdc, PoE (802.3af)	12 Vdc, PoE+ (802.3at)	12/24 Vdc, 24 Vac, PoE+ (802.3at)
Operating temperature	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-50 °C to +55 °C -58 °F to +131 °F	-40 °C to +50 °C -40 °F to +122 °F	-55 °C to +55 °C -67 °F to +131 °F	-55 °C to +55 °C -67 °F to +131 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-40 °C to +50 °C -40 °F to +122 °F
Dimensions	Ø 70 x 174 mm Ø 2.8 x 6.9 in	Ø 105 x 298 mm Ø 4.1 x 11.7 in	Ø 105 x 298 mm Ø 4.1 x 11.7 in	Ø 105 x 298 mm Ø 4.1 x 11.7 in	Ø 90 x 270 mm Ø 3.5 x 10.6 in	Ø 95 x 274 mm Ø 3.7 x 10.8 in	Ø 95 x 274 mm Ø 3.7 x 10.8 in	Ø 95 x 274 mm Ø 3.7 x 10.8 in	100 x 104 x 312 mm 3.9 x 4.1 x 12.3 in	100 x 104 x 312 mm 3.9 x 4.1 x 12.3 in	Ø 95 x 274 mm Ø 3.7 x 10.8 in

# Surveillance cameras

Compact dome | Fixed dome



## Ghelamco Stadium, Belgium

AA Gent have always been one of the mainstays of Belgian football. The Ghelamco Arena, with a seating capacity of 20,000. Thousands of people packed together and emotions running high, football stadiums call for the highest level of security. Implementing a well-balanced mix of surveillance hardware (Sicura IP cameras) has helped turn this modern venue into one of the safest of its kind, a place where both home and away, fans can enjoy a great day out.

## Other product groups



Explosion-proof cameras



Video over fiber



Video encoders



Network equipment



Video management



	Compact dome						Fixed dome								
Model	CD1004F2-EI-A	CD1004F2-EI	FD1004V1-EI-A	FD1004M1-EI-A	FD1004M1-EI	FD820v2M1IR	IFD822V2IR	IFD822Z1IR	FD822V2IR	FD822Z1IR	FD860Z1IR	FD1103M1-I	FD1103M1-EI	FD880M1IR	
Image sensor	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/3" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/1.7" CMOS	
Lens	Fixed 2.8 mm, F2.0	Fixed 2.8 mm, F2.0	Varifocal 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 3.0x optical zoom 3.0 - 9.0 mm, F1.7	Varifocal 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 3x optical zoom 3.0 - 9.0 mm, F1.2	Varifocal 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 3x optical zoom 3.0 - 9.0 mm, F1.2	Motorised 3x optical zoom 3 - 9 mm, F1.7	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 4.3x optical zoom 2.8 - 12 mm, F1.4	Motorised 2.3x optical zoom 3.5 - 8 mm, F1.4	
Focus	Fixed focus	Fixed focus	Manual focus	Push to focus	Push to focus	Push to focus	Manual focus	Autofocus	Manual focus	Autofocus	Autofocus	Autofocus	Autofocus	Push to focus	
Horizontal FOV	106°	106°	91.2° - 28.3°	91.2° - 28.3°	91.2° - 28.3°	109° - 33°	98° - 36°	113° - 36°	98° - 36°	113° - 36°	104° - 33°	94.5° - 30.5°	94.5° - 30.5°	116° - 52°	
Day/night (ICR)	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Supported encoding type	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, H.264i, MJPEG	H.264, H.264i, MJPEG	H.264, MJPEG	
Multistreaming	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
Max resolution	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1520 @20 fps 1920x1080 @30 fps	2688x1512 @15 fps 1920x1080 @60 fps	1920x1080 @60 fps	1920x1080 @60 fps	1920x1080 @60 fps	1920x1080 @60 fps	2048x1536 @30 fps 1920x1080 @60 fps	2048x1536 @45 fps 1920x1080 @60 fps	2048x1536 @45 fps 1920x1080 @60 fps	3840x2160 @30 fps 1920x1080 @60 fps	
Light sensitivity (30 IRE)	0.3 lux colour 0.01 lux B/W 0 lux with IR	0.3 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.03 lux colour 0.003 lux B/W 0 lux with IR	0.01 lux colour 0.0005 lux B/W 0 lux with IR	0.03 lux colour 0.003 lux B/W 0 lux with IR	0.01 lux colour 0.0005 lux B/W 0 lux with IR	0.04 lux colour 0.002 lux B/W 0 lux with IR	0.07 lux colour 0.007 lux B/W 0 lux with IR	0.07 lux colour 0.007 lux B/W 0 lux with IR	0.04 lux colour 0.002 lux B/W 0 lux with IR	
IR illuminator	850 nm, 10 m	850 nm, 10 m	850 nm, 30 m	850 nm, 30 m	850 nm, 30 m	850 nm, 40 m	850 nm, 40 m	850 nm, 40 m	850 nm, 35 m	850 nm, 35 m	850 nm, 35 m	850 nm, 30 m	850 nm, 40 m	850 nm, 40 m	
Video enhancements	120 dB WDR, BLC, 3DNR	120 dB WDR, 3DNR, BLC	120 dB WDR, 3DNR	120 dB WDR, 3DNR	120 dB WDR, 3DNR	120 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR, EIS	120 dB WDR, BLC, 3DNR	120 dB WDR, BLC, 3DNR	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	72 dB WDR, BLC, 3DNR	
Alarm inputs/outputs	-	-	-	-	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	1/1	
Analog video output	-	-	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	
Audio	-	2-way	-	-	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	2-way	
Integration protocols	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S, CGI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S+G, PSIA, CGI, ISAPI	ONVIF Profile S, CGI	
PTZ range	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Auto tracking	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Video analytics	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Basic	Intelligent	Intelligent	Basic	
Privacy masks	4	4	4	4	4	5	5	5	5	5	5	4	4	5	
Security	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering	
Micro SD support	128 GB	128 GB	128 GB	128 GB	128 GB	64 GB	128 GB	128 GB	128 GB	128 GB	128 GB	128 GB	128 GB	128 GB	
SFP interface	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Ingress protection	IP66	IP66	IP66	IP66	IP66	IP66	-	-	IP66	IP66	IP66	-	IP66	IP66	
Vandal proof	IK08	IK08	IK10	IK10	IK10	IK10	-	-	IK10	IK10	IK10	IK10	IK10	IK10	
UL/UR Listed	✓	✓	✓	✓	✓	-	-	-	-	-	-	✓	✓	-	
Power consumption	7 W	7 W	5.5 W	7.5 W	7.5 W	12.3 W	11.9 W	13.1 W	13.4 W	14.7 W	13.4 W	9 W	12 W	13.4 W	
Power	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12 Vdc, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	12 Vdc, PoE (802.3af)	12 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE+ (802.3at)	
Operating temperature	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-50 °C to +50 °C -58 °F to +122 °F	-10 °C to +50 °C 14 °F to +122 °F	-10 °C to +50 °C 14 °F to +122 °F	-50 °C to +55 °C -58 °F to +131 °F	-50 °C to +55 °C -58 °F to +131 °F	-55 °C to +55 °C -67 °F to +131 °F	-30 °C to +60 °C -22 °F to +140 °F	-30 °C to +60 °C -22 °F to +140 °F	-55 °C to +55 °C -67 °F to +131 °F	
Dimensions	Ø 120 x 55 mm Ø 4.7 x 2.2 in	Ø 120 x 55 mm Ø 4.7 x 2.2 in	Ø 140 x 100 mm Ø 5.5 x 3.9 in	Ø 140 x 100 mm Ø 5.5 x 3.9 in	Ø 140 x 100 mm Ø 5.5 x 3.9 in	Ø 134 x 117 mm Ø 5.2 x 4.6 in	Ø 117 x 90 mm Ø 4.6 x 3.6 in	Ø 117 x 90 mm Ø 4.6 x 3.6 in	Ø 134 x 117 mm Ø 5.9 x 5.2 in	Ø 134 x 117 mm Ø 5.9 x 5.2 in	Ø 134 x 117 mm Ø 5.9 x 5.2 in	Ø 140 x 122 mm Ø 5.5 x 4.8 in	Ø 165 x 127 mm Ø 6.5 x 5.0 in	Ø 134 x 117 mm Ø 5.9 x 5.2 in	



# Surveillance cameras

Fisheye | HD PTZ dome | Pressurised dome



	Fisheye		HD PTZ dome				Pressurised dome
Model	FD360IR-E	FD360IR-E-12	PD1022Z3-EI	HSD820v2H3-E	PD1103Z2-E	PD1103Z2-EI	HSD820H3PRH
Image sensor	1/1.8" CMOS	1/1.7" CMOS	1/2.8" CMOS	1/2.8" CMOS	1/3" CMOS	1/3" CMOS	1/2.8" CMOS
Lens	Fixed Fisheye 1.55 mm, F2.0	Fixed Fisheye 1.65 mm, F2.8	Motorised 20x optical zoom 4.7 - 94 mm, F1.6	Motorised 30x optical zoom 4.4 - 132 mm, F1.4	Motorised 36x optical zoom 4.5 - 162 mm, F1.6	Motorised 36x optical zoom 4.5 - 162 mm, F1.6	Motorised 30x optical zoom 4.3 - 129 mm, F1.6
Focus	Fixed focus	Fixed focus	Autofocus	Autofocus	Autofocus	Autofocus	Autofocus
Horizontal FOV	185°	190°	61.4° - 2.9°	60.5° - 2.3°	54.5° - 2.7°	54.5° - 2.7°	65.5° - 3.2°
Day/night (ICR)	✓	✓	✓	✓	✓	✓	✓
Supported encoding type	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG	H.264, MJPEG
Multistreaming	✓	✓	✓	✓	✓	✓	✓
Max resolution	3072x2048 @30 fps 1920x1080 @60 fps	4000x3000 @20 fps 3840x2160 @30 fps 1920x1080 @60 fps	1920x1080 @60 fps	1920x1080 @60 fps	2048x1536 @30 fps	2048x1536 @30 fps	1920x1080 @60 fps
Light sensitivity (30 IRE)	0.04 lux colour 0.002 lux B/W 0 lux with IR	0.1 lux colour 0.01 lux B/W 0 lux with IR	0.05 lux colour 0.01 lux B/W 0 lux with IR	0.02 lux colour 0.005 lux B/W	0.05 lux colour 0.01 lux B/W	0.05 lux colour 0.01 lux B/W 0 lux with IR	0.5 lux colour 0.1 lux B/W
IR illuminator	850 nm, 5 m	850 nm, 5 m	850 nm, 50 m	-	-	850 nm, 200 m	-
Video enhancements	70 dB WDR, 3DNR, BLC	70 dB WDR, 3DNR, BLC	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog, EIS	120 dB WDR, BLC, 3DNR	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	120 dB WDR, 3DNR, BLC, HLC, ROI, Defog	96 dB WDR, BLC, 3DNR
Alarm inputs/outputs	1/1	1/1	2/2	4/2	7/2	7/2	1/0
Analog video output	-	-	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC	PAL/NTSC
Audio	2-way	2-way	2-way	2-way	2-way	2-way	-
Integration protocols	ONVIF Profile S	ONVIF Profile S, CGI	ONVIF Profile S, PSIA, CGI, ISAPI	ONVIF Profile S, CGI, NTCIP	ONVIF Profile S+G, PSIA, CGI, ISAPI, NTCIP	ONVIF Profile S+G, PSIA, CGI, ISAPI, NTCIP	ONVIF Profile S, OSA (HTTP API), NTCIP
PTZ range	ePTZ	ePTZ	Pan: 360° continuous, Tilt: -5° to 90°	Pan: 360° continuous, Tilt: -10° to 90°	Pan: 360° continuous, Tilt: -20° to 90°	Pan: 360° continuous, Tilt: -20° to 90°	Pan: 360° continuous, Tilt: -10° to 90°
Auto tracking	-	-	Yes	-	Yes	Yes	-
Video analytics	Basic	Basic	Basic	Basic	Intelligent	Intelligent	Basic
Privacy masks	5	5	8	16	24	24	16
Security	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1x, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering, Watermark	Password protected, HTTPS, 802.1X, IP address filtering
Micro SD support	64 GB	128 GB	128 GB	64 GB	128 GB	128 GB	64 GB
SFP interface	-	-	-	Yes	-	-	-
Ingress protection	IP66	IP66	IP66	IP66	IP66	IP66	IP67
Vandal proof	IK10	IK10	-	IK10	IK10	IK10	-
UL/UR Listed	-	-	-	-	✓	✓	✓
Power consumption	10.1 W	10.1 W	18 W	25 W / 57 W	60 W	60 W	75 W
Power	12/24 Vdc, 24 Vac, PoE (802.3af)	12/24 Vdc, 24 Vac, PoE (802.3af)	12 Vdc, PoE+ (802.3at)	28 to 48 Vdc, 24 Vac, Hi-PoE	24 Vac, Hi-PoE	24 Vac, Hi-PoE	24 Vac
Operating temperature	-10 °C to +50 °C +14 °F to +122 °F	-10 °C to +50 °C +14 °F to +122 °F	-30 °C to +65 °C -22 °F to +149 °F	-40 °C to +50 °C -40 °F to +122 °F	-40 °C to +65 °C -40 °F to +149 °F	-40 °C to +65 °C -40 °F to +149 °F	-45 °C to +60 °C -49 °F to +140 °F
Dimensions	Ø 117 x 43 mm Ø 4.6 x 1.7 in	Ø 117 x 43 mm Ø 4.6 x 1.7 in	Ø 170 x 161 mm Ø 6.7 x 6.3 in	Ø 192 x 283 mm Ø 7.6 x 11.1 in	Ø 260 x 331 mm Ø 10.2 x 13.0 in	Ø 266 x 365 mm Ø 10.5 x 14.4 in	Ø 290 x 340 mm Ø 11.4 x 13.4 in

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TKH Security Solutions offers a wide range of systems for access control, video surveillance, intrusion detection and video management.

