



**PERFECTTM
VIEW**



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Perfect View TVI Surveillance Catalog

2017 Q1/Q2

1080P HD-TVI WDR/ Analog Camera

HAC304D-OD4



HAC304D-ID3



HAC304D-VB5



HAC304D-VBM



Description	1080P Vari-Focal IR Dome, Exterior	1080P Vari-Focal IR Dome, Interior	1080P Vari-Focal EXIR Bullet, Exterior	1080P Motorized Vari-Focal Bullet, Exterior
Image Sensor	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
Effective Pixels	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Min Illumination	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT
IR Feature	Up to 120ft	Up to 100ft	Up to 150ft	Up to 400ft
Wide dynamic Range	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120dB
OSD Manual	Built in	Built in	Built in	Built In
Shutter Time	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/30 s to 1/50,000 s
Lens	2.8-12mm @ F1.4	2.8-12mm @ F1.4	2.8-12mm @ F1.4	5-50mm
Angle of View	92° - 32°	92° - 32°	92° - 32°	59.8° - 6.2°
Digital Zoom	62x	62x	62x	62x
Communication	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC Control) via DVR
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
Composite Video Output	1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output
Adjustment Range	Pan: 0 - 355°, Tilt: 0 - 80°	Pan: 0 - 355°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0°~360°, Tilt:0°~ 90°
Frame Rate	1080P @ 30fps	1080P @ 30fps	1080P @ 30fps	1080p @ 30fps
Weather Resistance	IP66, IK10	N/A	IP66	IP66
Motion Detection	4 zones	4 zones	4 zones	4 zones
Privacy Mask	8 zones	8 zones	8 zones	8 zones
Power Consumption	Dual Volt:12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W	Dual Volt:12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W	Dual Volt: 12V DC: Max. 7W ; 24V AC: Max. 10W	Dual Volt: 12 VDC: Max. 11W; 24 VAC: Max. 11W(heat off)
Operating Temperature	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)
	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less
Dimension	Φ145.3 × 124.2 mm (Φ5.72" × 4.89")	Φ136 × 101 mm (Φ5.35" × 3.98")	300.82 × 100.76 × 107.55mm (11.84" × 3.97" × 4.23")	12.3" × 3.9" × 4.2"
Weight	1.95 lb	0.84 lb	1.54 lbs	3.75 lbs

1080P HD-TVI WDR Camera

HAC334D-OD4Z



HAC334D-VB4Z



HAC334D-VD4Z



HAC334-FB4



Description	1080P Vari-Focal IR Dome, Exterior	1080P Vari-Focal EXIR Bullet, Exterior	1080P Vari-Focal EXIR Turret, Exterior	1080P EXIR Bullet, Exterior
Image Sensor	2MP CMOS Image Sensor	2MP CMOS Image Sensor	2MP CMOS Image Sensor	2MP CMOS Image Sensor
Effective Pixels	1928(H) x 1088(V)	1928(H) x 1088(V)	1928(H) x 1088(V)	1928(H) x 1088(V)
Min Illumination	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	ICR	ICR	ICR	ICR
IR Feature	up to 120ft	up to 120ft	up to 120ft	up to 120ft
Wide Dynamic Range	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB
OSD Manual	Built In	Built In	Built In	Built In
Shutter Time	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s
Lens	2.8-12mm Motorized	2.8-12mm @ F1.4	2.8 - 12 mm @ F1.4	3.6mm (2.8mm Optional)
Angle of View	114° - 35°	114° - 35°	114° - 35°	103° (2.8mm), 82° (3.6mm)
Digital Zoom	N/A	N/A	N/A	N/A
Communication	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
Composite Output	N/A	N/A	N/A	N/A
Adjustment Range	Pan: 0 - 340°, Tilt: 0 - 75°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 75°	Pan: 0 - 360°, Tilt: 0 - 90°
Frame Rate	1080p @ 30fps	1080p @ 30fps	1080p @ 30fps	1080p @ 30fps
Weather Resistance	IP66, IK10	IP66	IP66	IP66
Motion Detection	4 zones	4 zones	4 zones	4 zones
Privacy Mask	2 zones	2 zones	2 zones	2 zones
Power Consumption	Dual Voltage +/- 15%, Max 7W	Dual Voltage +/- 15%, Max 9W	12VDC +/- 15%, Max 6W	12VDC +/- 15%, Max 5W
Operating Temperature	-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)
	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less
Dimension	Φ5.72" × 4.9"	3.62" × 3.34" × 10.6"	5.29" × 4.88" × 4.39"	3.41" × 3.23" × 8.67"
Weight	1.95 lbs	1.52 lbs	0.90 lbs	0.95 lbs

1080P HD-TVI WDR / Analog Camera

HAC304-VD5



HAC304-FD4



HAC304-FB8



HAC304-FB4



HAC304-MD



1080P Vari-Focal EXIR Turret, Exterior	1080P EXIR Turret, Exterior	1080P EXIR Bullet, Exterior	1080P EXIR Bullet, Exterior	1080P IR Dome, Exterior
1/3" Progressive Scan CMC4:H5OS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT
Up to 150ft, Smart IR	Up to 120ft, Smart IR	Up to 240ft, Smart IR	Up to 120ft, Smart IR	Up to 60ft, Smart IR
True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB
Built In	Built In	Built In	Built In	Built In
1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s
2.8-12mm @ F1.4	3.6mm (Optional 2.8, 6, 8, 12mm)	3.6mm (Optional 6, 8, 12mm)	3.6mm (Optional 2.8, 6, 8, 12mm)	3.6mm (Optional 2.8, 6mm)
92° - 32°	80.9°(3.6mm),103.5°(2.8mm), 54.3°(6.0mm)	80.9°(3.6mm), 54.3°(6.0mm), 38°(8.0mm)	80.9°(3.6mm), 103.5°(2.8mm), 54.3°(6.0mm)	80.9°(3.6mm), 103.5°(2.8mm), 54.3°(6.0mm)
62x	62x	62x	62x	62x
OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR
1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output
Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°
1080P @ 30fps	1080P @ 30fps	1080P @ 30fps	1080P @ 30fps	1080P @ 30fps
IP66	IP66	IP66	IP66	IP66
4 zones	4 zones	4 zones	4 zones	4 zones
8 zones	8 zones	8 zones	8 zones	8 zones
12VDC +/- 10%, Max 7W	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 3.5W
-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-30 °C - 60 °C (-22°F - 140 °F)	-30 °C - 60 °C (-22°F - 140 °F)
Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
Φ130.54 × 93.24 mm (Φ5.14" × 3.67")	Φ114.6 × 89.1mm(Φ4.5" × 3.5")	105 × 104.8 × 263.1mm(4.13" × 4.13" × 10.36")	94.6 × 83 × 210.8mm(3.72" × 3.27" × 8.30")	89.6 × 59.1 mm (3.53" × 2.33")
0.66 lb	0.66 lb	1.54 lbs	1.54 lbs	0.88 lb

1080P HD-TVI WDR Camera

HAC334-FD4M



HAC334-OD



HAC334-MD



HAC334-MB



1080P EXIR Turret, Exterior	1080P IR Dome, Exterior	1080P IR Turret, Exterior	1080P IR Bullet, Exterior	Description
2MP CMOS Image Sensor	2MP CMOS Image Sensor	2MP CMOS Image Sensor	2MP CMOS Image Sensor	Image Sensor
1928(H) x 1088(V)	1928(H) x 1088(V)	1928(H) x 1088(V)	1928(H) x 1088(V)	Effective Pixels
0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	Min Illumination
ICR	ICR	ICR	ICR	Day & Night
up to 120ft	up to 60ft	up to 60ft	up to 60ft	IR Feature
True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	Wide Dynamic Range
Built In	Built In	Built In	Built In	OSD Manual
1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	Shutter Time
3.6mm (2.8mm Optional)	3.6mm (2.8mm optional)	3.6mm (2.8mm)	3.6mm (2.8mm optional)	Lens
103° (2.8mm), 82° (3.6mm)	103° (2.8mm), 82° (3.6mm)	103° (2.8mm), 82° (3.6mm)	103° (2.8mm), 82° (3.6mm)	Angle of View
N/A	N/A	N/A	N/A	
OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	Digital Zoom
1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	Communication
Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	HD-TVI Video Output
N/A	N/A	N/A	N/A	HD-TVI Over Cat6
Pan: 0 - 360°, Tilt: 0 - 75°	Pan: 0 - 355°, Tilt: 0 - 75°	Pan: 0 - 360°, Tilt: 0 - 75°	Pan: 0 - 360°, Tilt: 0 - 90°	Composite Output
1080p @ 30fps	1080p @ 30fps	1080p @ 30fps	1080p @ 30fps	Adjustment Range
IP66	IP66, IK10	IP66	IP66	Frame Rate
4 zones	4 zones	4 zones	4 zones	Weather Resistance
2 zones	2 zones	2 zones	2 zones	Motion Detection
12VDC +/- 15%, Max 5W	12VDC +/- 15%, Max 5W	12VDC +/- 15%, Max 5W	12VDC +/- 15%, Max 5W	Privacy Mask
-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)	-40 °C - 60 °C (-40°F - 140 °F)	Power Consumption
Humidity 90% or less	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less	Operating Temperature
Φ4.33"×3.67"	Φ4.37"×3.24"	3.58"×3.25"×2.69"	2.30"×2.19"×6.05"	
0.57 lbs	1.21 lbs	0.88 lbs	0.79 lbs	Dimension
				Weight

HD-TVI PTZ Camera

HAC304-MB



HAC304-BX



1080P IR Bullet, Exterior	1080P BOX
1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
1920(H) x 1080(V)	1920(H) x 1080(V)
0.01 Lux @ (F1.2, AGC ON),	0.01 Lux @ (F1.2, AGC ON)
ICR, Color/ BW/ EXT	ICR
up to 60ft. Smart IR	N/A
True WDR, 120 dB	True WDR, 120dB
Built In	Built In
1/25(1/30) s to 1/50,000	1/30 s to 1/50,000 s
3.6mm (Optional 6mm)	C/CS Mount
80.9"(3.6mm), 54.3"(6.0mm)	
62x	62x
OSD (UTC control) via DVR	OSD (UTC Control) via DVR
1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
1 Vp-p Composite Output	1 Vp-p Composite Output
Horiz: 0 - 360°, Tilt: 0 - 90°	
1080P @ 30fps	1080p @ 30fps
IP66	N/A
4 zones	4 zones
8 zones	8 zones
12 VDC +/- 10%, Max. 4W	Dual Volt: 12 VDC: Max. 4W; 24 VAC: Max. 4.5W
-30 °C - 60 °C (-22°F - 140 °F)	-30 °C - 60 °C (-22°F - 140 °F)
Humidity 90% or less (non-condensing)	Humidity 90% or less
(Φ2.76" x 5.89")	2.7" x 2.3" x 5.85"
1.79 lb	1.83 lbs

HAP313-IR



HAP313-OD



Description	1080P HD-TVI IR PTZ, Exterior	1080P HD-TVI PTZ, Exterior
Image Sensor	1/3" CMOS Image Sensor	1/3" CMOS Image Sensor
Effective Pixels	1920 x 1080	1920 x 1080
Min Illumination	Color: 0.02Lux@F1.6, AGC ON, B/W: 0.002Lux@F1.6, AGC ON	Color: 0.02Lux@F1.6, AGC ON, B/W:
Max. Image Resolution	1080P	1080P
Wide Dynamic Range	DWDR	DWDR
Electronic Shutter	1- 1 /10,000s	1- 1 /10,000s
Lens	4-120mm, 30X	4-120mm, 30X
Optical Zoom	30X	30X
Digital Zoom	16X	16X
HD Video Output	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)
Park Action	Preset / Patrol / Pattern / Pan scan / Tilt scan	Preset / Patrol / Pattern / Pan scan
	Frame Scan / Random scan / Panorama scan	Frame Scan / Random scan / Panorama scan
Pan & Tilt Range	360° endless, -15°-90° (Auto Flip)	360° endless, -15°-90° (Auto Flip)
Pan Speed	Pan Manual Speed: 0.1°-160°/s, Pan Preset Speed: 240°/s	Pan Manual Speed: 0.1°-160°/s, Pan Preset Speed: 240°/s
Tilt Speed	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 200°/s	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 200°/s
Day/ Night	IR Cut Filter, 3D DNR	IR Cut Filter, 3D DNR
IR Range	360ft	N/A
Weather Resistance	IP66	IP66
RS-485	Pelco-P, Pelco-D, OSD (UTC control) via DVR	Pelco-P, Pelco-D, OSD (UTC control) via DVR
Power	24VAC, Max. 20W with Heater On, 12W with Heater Off	24VAC, Max. 20W with Heater On, 12W with Heater Off
Operating Temperature	-30 °C-65°C(-22°F-149°F)	-30 °C-65°C(-22°F-149°F)
Dimension	Φ220x353.4mm (Φ8.66"x13.91")	Φ220x353.4mm (Φ8.66"x13.91")
Weight	12.13lbs	12.13lbs

720P HD-TVI Camera

HAC303D-OD4



HAC303D-ID3



HAC303D-VB4



HAC303-FD4



HAC303-FD



720P Vari-focal IR Vandal Dome, Exterior	720P Vari-focal IR Dome, Interior	720P Vari-focal IR Bullet, Exterior	720P EXIR Turret Camera, Exterior	720P EXIR Turret, Exterior
1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
1305(H) x 1049(V)	1305(H) x 1049(V)	1305(H) x 1049(V)	1280(H) x 720(V)	1280(H) x 720(V)
0.001 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.001 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.001 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
ICR, 3D DNR	ICR, 3D DNR	ICR, 3D DNR	ICR	ICR
Up to 120ft, Smart IR	Up to 100ft, Smart IR	Up to 120ft, Smart IR	Up to 120ft, Smart IR, EXIR	Up to 60ft, Smart IR, EXIR
DWDR	DWDR	DWDR	N/A	N/A
Yes	Yes	Yes	No	No
1 / 60 s to 1 / 50,000 s	1 / 60 s to 1 / 50,000 s	1 / 60 s to 1 / 50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s
2.8-12mm @ F1.4	2.8-12mm @ F1.4	2.8-12mm @ F1.4	3.6mm (Optional 2.8, 6, 8mm)	3.6mm (Optional 2.8, 6, 8mm)
92° - 32°	92° - 32°	92° - 32°	99.73"(2.8mm), 76.88"(3.6mm)	99.73"(2.8mm), 76.88"(3.6mm),
			50.1"(6.0mm), 34.5"(8.0mm)	50.1"(6.0mm), 34.5"(8.0mm)
Yes	Yes	Yes	N/A	N/A
OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR	N/A	N/A
1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)
Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output	N/A	N/A
Pan: 0 - 355°, Tilt: 0 - 80°	Pan: 0 - 355°, Tilt: 0 - 80°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°
720P @ 30fps	720P @ 30fps	720P @ 30fps	720P @ 30fps	720P @ 30fps
IP66, IK10	N/A	IP66	IP66	IP66
4 zones	4 zones	4 zones	N/A	N/A
8 zones	8 zones	8 zones	N/A	N/A
Dual Volt: 12 VDC: Max. 3.5W ; 24 VAC: Max. 5W	Dual Volt: 24 VAC: Max. 5W, 12 VDC: Max. 3.5W	Dual Volt: 24 VAC: Max. 6W, 12 VDC: Max. 4W	12VDC +/- 10%, Max 4.5W	12VDC +/- 10%, Max 3W
-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)
Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
Φ145.3 x 124.2 mm (Φ5.72" x 4.89")	Φ136 x 101 mm (Φ5.35" x 3.98")	Φ105 x 86.9 x 267.2mm (Φ4.13" x 3.42" x 10.52")	Φ114.6 x 89.1mm (Φ4.5" x 3.5")	Φ114.6 x 89.1mm (Φ4.5" x 3.5")
1.95 lb	0.84 lb	2.97 lb	0.66 lb	0.66 lb

HAP312-IR



HAP312-OD



HAP312-ID



	1080P HD-TVI IR PTZ, Exterior	1080P HD-TVI PTZ, Exterior	1080P HD-TVI PTZ, Exterior
	1/3" CMOS Image Sensor	1/3" CMOS Image Sensor	1/3" CMOS Image Sensor
	1920 x 1080	1920 x 1080	1920 x 1080
0.002Lux@F1.6, AGC ON	Color: 0.02Lux@ F1.6, AGC ON, B/W: 0.002Lux@F1.6, AGC ON	Color: 0.02Lux@ F1.6, AGC ON, B/W: 0.002Lux@F1.6, AGC ON	Color: 0.02Lux@ F1.6, AGC ON, B/W: 0.002Lux@F1.6, AGC ON
	1080P	1080P	1080P
	DWDR	DWDR	DWDR
	1- 1 /10,000s	1- 1 /10,000s	1- 1 /10,000s
	4-92mm, 23X	4-92mm, 23X	4-92mm, 23X
	23X	23X	23X
	16X	16X	16X
U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)
/ Tilt scan	Preset / Patrol / Pattern / Pan scan / Tilt scan	Preset / Patrol / Pattern / Pan scan / Tilt scan	Preset / Patrol / Pattern / Pan scan / Tilt scan
ama scan	Frame Scan / Random scan / Panorama scan	Frame Scan / Random scan / Panorama scan	Frame Scan / Random scan / Panorama scan
	360° endless, -15°-90° (Auto Flip)	360° endless, -15°-90° (Auto Flip)	360° endless, -15°-90° (Auto Flip)
Preset Speed: 240°/s	Pan Manual Speed: 0.1°-160°/s, Pan Preset Speed: 240°/s	Pan Manual Speed: 0.1°-160°/s, Pan Preset Speed: 240°/s	Pan Manual Speed: 0.1°-160°/s, Pan Preset Speed: 240°/s
Preset Speed: 200°/s	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 200°/s	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 200°/s	Tilt Manual Speed: 0.1°-120°/s, Tilt Preset Speed: 200°/s
	IR Cut Fliter, 3D DNR	IR Cut Fliter, 3D DNR	IR Cut Fliter, 3D DNR
	360ft	N/A	N/A
	IP66	IP66	N/A
ia DVR	Pelco-P, Pelco-D, OSD (UTC control) via DVR	Pelco-P, Pelco-D, OSD (UTC control) via DVR	Pelco-P, Pelco-D, OSD (UTC control) via DVR
W with Heater Off	24VAC, Max. 30W, IR: 9W, Heater: 6W -30 °C-65°C(-22°F-149°F)	24VAC, Max. 20W -30 °C-65°C(-22°F-149°F)	24VAC, Max. 12W -30 °C-65°C(-22°F-149°F)
	Φ220x353.4mm (Φ8.66"x13.91")	Φ220x353.4mm (Φ8.66"x13.91")	Φ220x353.4mm (Φ8.66"x13.91")
	9.92lbs	6.61lbs	6.61lbs

HAC303-FB8



HAC303-FB4



HAC303-FB



HAC303-MD



HAC303-MB



720P EXIR Bullet, Exterior	720P EXIR Bullet, Exterior	720P EXIR Bullet, Exterior	720P IR Dome, Exterior	720P IR Bullet, Exterior
1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
1280(H) x 720(V)	1280(H) x 720(V)	1280(H) x 720(V)	1280(H) x 720(V)	1280(H) x 720(V)
0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
ICR	ICR	ICR	ICR	ICR
Up to 240ft, Smart IR, EXIR	Up to 120ft, Smart IR, EXIR	Up to 60ft, Smart IR, EXIR	Up to 60ft, Smart IR	Up to 60ft, Smart IR
N/A	N/A	N/A	N/A	N/A
No	No	No	No	No
1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s
3.6mm (Optional 6, 8, 12mm)	3.6mm (Optional 6, 8mm)	3.6mm (Optional 2.8, 6, 8mm)	3.6mm (Optional 2.8, 6mm)	3.6mm (Optional 6mm)
76.88"(3.6mm), 50.1"(6.0mm),	76.88"(3.6mm), 50.1"(6.0mm),	99.73"(2.8mm), 76.88"(3.6mm),	99.73"(2.8mm), 76.88"(3.6mm),	76.88"(3.6mm), 50.1"(6.0mm)
34.5"(8.0mm), 22.81"(12.0mm)	34.5"(8.0mm)	50.1"(6.0mm), 34.5"(8.0mm)	50.1"(6.0mm)	
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)	1 HD-TVI out (up to 1200ft with RG59U 95%)
Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
N/A	N/A	N/A	N/A	N/A
Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°
720P @ 30fps	720P @ 30fps	720P @ 30fps	720P @ 30fps	720P @ 30fps
IP66	IP66	IP66	IP66	IP66
N/A	N/A	N/A	N/A	N/A
N/A	N/A	N/A	N/A	N/A
12VDC +/- 10%, Max 4.5W	12VDC +/- 10%, Max 4.5W	12VDC +/- 10%, Max 3W	12VDC +/- 10%, Max 3.5W	12VDC +/- 10%, Max 3.5W
-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-10 °C - 60 °C (14 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)
Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
105x104.8x263.1mm(4.13" x 4.13" x 10.36")	94.6x83x210.8mm (3.72"x3.27"x8.30")	94.6x83x210.8mm (3.72"x3.27"x8.30")	Φ89.6 x 59.1H mm (Φ3.53" x 2.33"H)	Φ70x149.5 mm (Φ2.76" x 5.89")
1.76 lb	1.76 lb	1.54 lb	0.88 lb	0.79 lb

HAC303-CP



Description	720P Motorized Vari-Focal IR Bullet	Description	Video Compression
Image Sensor	1/2.7" Progressive Scan CMOS	Audio Compression	HD-TVI/ Analog Video Input
Effective Pixels	1305(H) x 1088(V)	HD-TVI/ Analog Video Input	IP video Input
Min Illumination	0.001 Lux @ (F1.2, AGC ON), 0 Lux with IR	Video Output	Recoding resolution
Day & Night	ICR, HLC	Audio Input	Audio Output
IR Feature	up to 120ft	Audio Bit Rate	Recording Speed
Wide Dynamic Range	DWDR	Synchronous Playback	Alarm Input/ Output
OSD Manual	Built In	Network Interface	USB Interface
Shutter Time	1/30 s to 1/50,000 s	Communication	HDD Interface
Lens	6-22mm	eSATA	Chasis
Angle of View	102° - 35°	Dimension	Power
Digital Zoom	N/A	Operation Temperture	Weight
Communication	OSD (UTC Control) via DVR		
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%		
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft		
Composite Output	1Vp-P Composite Output (75Ω / Bnc)		
Adjustment Range	Universal Mount		
Frame Rate	720p @ 30fps		
Weather Resistance	IP66		
Motion Detection	4 zones		
Privacy Mask	2 zones		
Power Consumption	12 VDC: +/- 15% Max. 5W		
Operating Temperature	-40 °C - 60 °C (-40°F - 140 °F)		
Humidity	Humidity 90% or less		
Dimension	5.28×4.57×11.54		
Weight	3.5 lbs		

Hidden Type Camera

HD-TVI Accessories

HAC304-HP



HAC304-HS



HKB-1100KI



PTZ/ IP/ DVR
Keyboard controller

HTA-TTP111HD



HD-TVI balun up to 1000ft.

HAC-TT-X41T



HD-TVI Testing Monitor

Description	1080P HD-TVI PIR Camera	1080P HD-TVI Smoke Camera
Image Sensor	1/3" Sony Cmos : 2.0 Mega	1/3" Sony Cmos : 2.0 Mega
Signal System	Pal / Ntsc	Pal / Ntsc
Effective Pixels	1920(H) X 1080(V)	1920(H) X 1080(V)
Shutter Time	1 / 25(1 / 30) S To 1 / 50,000 S	1 / 25(1 / 30) S To 1 / 50,000 S
Lens	3.7Mm Pin Hole Lens	3.7Mm Pin Hole Lens
Lens Mount	M12	M12
Wide Dynamic Range	120dB	120dB
Synchronization	Internal	Internal
Video Frame Rate	1920(H) X 1080(V) @ 25/30 Fps	1920(H) X 1080(V) @ 25/30 Fps
Hd Video Output	1 Analog Hd Output	1 Analog Hd Output
Cvbs Output	1Vp-P Composite Output (75Ω / Bnc)	1Vp-P Composite Output (75Ω / Bnc)
S/N Ratio	More Than 52dB	More Than 52dB
Camera Id	On / Off (15 Characters, Position Programmable)	On / Off (15 Characters, Position Programmable)
Agc	Support	Support
White Balance	Atw, Awc-Set, Indoor, Outdoor, Manual	Atw, Awc-Set, Indoor, Outdoor, Manual
Blc	Support	Support
Anti-Flicker	On / Off	On / Off
Working Temperature	-30°C - 60 °C (-22°F - 140 °F)	-30°C - 60 °C (-22°F - 140 °F)
Power Supply	12Vdc	12Vdc
Power Consumption	Max. 1.6W (130mA)	Max. 1.6W (130mA)
Dimensions	69(W) X 48(D) X 120(H) mm	124(Dia) X 52(H)
Weight	103 g (0.23 lb)	157 g (0.35 lb)

HAR705-16

HAR705-8

HAR504-32

HAR504-24



16 Ch. Tribrid TVI DVR	8 Ch. Tribrid TVI DVR	32 Ch. Tribrid TVI DVR	24 Ch. Tribrid TVI DVR
H.264	H.264	H.264	H.264
G.711u	G.711u	G.711u	G.711u
16 BNC input, 1Vp-p, 75Ω	8 BNC input, 1Vp-p, 75Ω	32 BNC input, 1Vp-p, 75Ω	24 BNC input, 1Vp-p, 75Ω
2 Channel up to 2 megapixel resolution	2 Channel up to 2 megapixel resolution	8 Channel up to 2 megapixel resolution	8 Channel up to 2 megapixel resolution
1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080	1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080	1 HDMI, 1 VGA up to 1920 x 1080	1 HDMI, 1 VGA up to 1920 x 1080
Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF
Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA
16-ch input, 1-ch two way audio	8-ch input, 1-ch two way audio	4-ch input, 1-ch two way audio RCA (2.0 Vp-p, 1kΩ)	4-ch input, 1-ch two way audio RCA (2.0 Vp-p, 1kΩ)
2-ch RCA output (Linear 1kΩ)	2-ch RCA output (Linear 1kΩ)	2-ch RCA output (Linear 1kΩ)	2-ch RCA output (Linear 1kΩ)
64bps	64bps	64bps	64bps
1080p @ 30fps per Channel	1080p @ 30fps per Channel	1080p @ 15fps per Channel	1080p @ 15fps per Channel
16 Ch.	8 Ch.	32 Ch.	24 Ch.
16 / 4	16 / 4	16 / 4	16 / 4
2 RJ45 10M / 100M / 1000M self-adaptive Ethernet interface	2 RJ45 10M / 100M / 1000M self-adaptive Ethernet interface	1 RJ45 10M / 100M / 1000M self-adaptive Ethernet interface	1 RJ45 10M / 100M / 1000M self-adaptive Ethernet interface
3 USB 2.0 interface	3 USB 2.0 interface	3 USB 2.0 interface	3 USB 2.0 interface
1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface
8 SATA interface up to 8TB each	8 SATA interface up to 8TB each	4 SATA interface up to 8TB each	4 SATA interface up to 8TB each
1 eSATA	1 eSATA	1 eSATA	1 eSATA
19-inch rack-mounted 2U chassis	19-inch rack-mounted 2U chassis	19-inch rack-mounted 1.5U chassis	19-inch rack-mounted 1.5U chassis
445 × 470 × 90 mm (17.5 × 18.5 × 3.5 inch)	445 × 470 × 90 mm (17.5 × 18.5 × 3.5 inch)	445 × 390 × 70 mm (17.5 × 15.3 × 2.7 inch)	445 × 390 × 70 mm (17.5 × 15.3 × 2.7 inch)
100 ~ 240VAC, 47 ~ 63HZ, Max. 30W	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W	100 ~ 240VAC, 47 ~ 63HZ, Max. 65W	100 ~ 240VAC, 47 ~ 63HZ, Max. 55W
-10 °C ~ +55 °C (14 °F ~ 131 °F)	-10 °C ~ +55 °C (14 °F ~ 131 °F)	-10 °C ~ +55 °C (14 °F ~ 131 °F)	-10 °C ~ +55 °C (14 °F ~ 131 °F)
Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
17.6 lb	17.6 lb	11.01 lb	11.01 lb

Tribrid DVR

HAR505-16

HAR505-8



Description	16 Ch. Tribrid TVI Recorder	8 Ch. Tribrid TVI Recorder
Video Compression	H.264	H.264
Audio Compression	G.711u	G.711u
HD-TVI/ Analog Video Input	16 BNC input, 1Vp-p, 75Ω	8 BNC input, 1Vp-p, 75Ω
IP video Input	2 Channel up to 2 megapixel resolution	2 Channel up to 2 megapixel resolution
Video Output	1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080	1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080
Recoding resolution	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF
	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA
Audio Input/ Output	4-ch input, 1-ch two way audio, 2-ch RCA output	4-ch input, 1-ch two way audio, 2-ch RCA output
Audio Bit Rate	64kbps	64kbps
Recording Speed	1080P @ 30fps per Channel	1080P @ 30fps per Channel
Synchronous Playback	16 Ch.	8
Alarm Input/ Output	16 / 4	16 / 4
Network Interface	1 RJ45 10M/ 100M/ 1000M adaptive Ethernet interface	1 RJ45 10M/ 100M/ 1000M adaptive Ethernet interface
USB Interface	3 USB 2.0 interface	3 USB 2.0 interface
Communication	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface
HDD Interface	4 SATA HDD Bay up to 8TB each bay	4 SATA HDD Bay up to 8TB each bay
eSATA	1 eSATA	1 eSATA
Chasis	19-inch rack-mounted 1.5U chassis	19-inch rack-mounted 1.5U chassis
Dimension	445 × 390 × 70 mm (17.5 × 15.3 × 2.7 inch)	445 × 390 × 70 mm (17.5 × 15.3 × 2.7 inch)
Power	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W
Operation Temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F)	-10 °C ~ +55 °C (14 °F ~ 131 °F)
	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
Weight	11.0 lb	11.0 lb

1080P HD-TVI WDR / Analog Camera

HAC304D-OD4Z



HAC304-VD4Z



HAC304D-VB4ZH



Description	1080P Motorized Vandal IR Dome	1080P Motorized IR Turret	1080P Motorized EXIR Bullet w/ Heater
Image Sensor	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS
Effective Pixels	1920(H) x 1080(V)	1920(H) x 1080(V)	1920(H) x 1080(V)
Min Illumination	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT	ICR, Color/ BW/ EXT
IR Feature	Up to 131ft	Up to 165ft	Up to 165ft
Wide dynamic Range	WDR 120dB, 3D DNR	WDR 120dB, 3D DNR	WDR 120dB, 3D DNR
OSD Manual	Built in	Built in	Built in
Shutter Time	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s
Lens	2.8-12mm @ F1.4 Motorized	2.8-12mm @ F1.4 Motorized	2.8-12mm @ F1.4 Motorized
Angle of View	92° - 32°	92° - 32°	92° - 32°
Digital Zoom	62x	62x	62x
Communication	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
Composite Video Output	1 Vp-p Composite Output	1 Vp-p Composite Output	1 Vp-p Composite Output
Adjustment Range	Pan: 0 - 355°, Tilt: 0 - 80°	Pan: 0 - 355°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°
Frame Rate	1080P @ 30fps	1080P @ 30fps	1080P @ 30fps
Weather Resistance	IP66, IK10	IP66	IP66
Motion Detection	4 zones	4 zones	4 zones
Privacy Mask	8 zones	8 zones	8 zones
Power Consumption	Dual Volt: 12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W 12 VDC: Max. 4.5W		Dual Volt: 12V DC: Max. 7W ; 24V AC: Max. 10W
Operating Temperature	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F)	-20 °C - 60 °C (-4 °F - 140 °F) - Heater
	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)
Dimension	Φ5.72x 4.89"	Φ5.35" x 3.98"	11.84"×3.97"×4.23"
Weight	2.97 lb	0.66lb	1.54 lbs

Quadbrid DVR

HAR315-4



HAR315-8

































HAR315-16



Description	4 Ch. Quadbrid TVI DVR	8 Ch. Quadbrid TVI DVR	16 Ch. Quadbrid TVI DVR
Video Compression	H.264/H.264+	H.264/H.264+	H.264/H.264+
Audio Compression	G.711u	G.711u	G.711u
TVI/AHD/Analog	4-ch BNC Interface (1.0Vp-p, 75 Ohm)	8-ch BNC Interface (1.0Vp-p, 75 Ohm)	16-ch BNC Interface (1.0Vp-p, 75 Ohm)
IP Video Input	2 Ch. up to 4MP Resolution	2 Ch. up to 4MP Resolution	2 Ch. up to 4MP Resolution
Video Output	HDMI & VGA up to 1080P	HDMI & VGA up to 4K	HDMI & VGA up to 4K
Recording Resolution	Main Stream: 3MP@15fps / 1080P@30fps Sub-stream: WD1/4CIF/CIF/QCIF/QVGA	Main Stream: 3MP@15fps / 1080P@30fps Sub-stream: WD1/4CIF/CIF/QCIF/QVGA	Main Stream: 3MP@15fps / 1080P@30fps Sub-stream: WD1/4CIF/CIF/QCIF/QVGA
Audio Input / Output	4-ch, RCA (2.0 Vp-p, 1 K) / 1-Ch, RCA	4-ch, RCA (2.0 Vp-p, 1 K) / 1-Ch, RCA	4-ch, RCA (2.0 Vp-p, 1 K) / 1-Ch, RCA
Audio Bit Rate	64bps	64bps	64bps
Recording Speed	1080p@30fps / 3MP@12fps	1080p@30fps / 3MP@12fps	1080p@30fps / 3MP@12fps
Synchronous Playback	4-Ch	8-Ch	16-Ch
Alarm Input / Output	4/1	8/1	16/1
Network Interface	1; 10/100 self-adaptive Ethernet interface	1; 10/100/1000 self-adaptive Ethernet interface	1; 10/100/1000 self-adaptive Ethernet interface
USB Interface	2x USB 2.0	1x USB 2.0; 1x USB 3.0	1x USB 2.0; 1x USB 3.0
Communication	1 RS-485, half-duplex	1 RS-485, half-duplex	1 RS-485, half-duplex
HDD Interface	1 SATA up to 8TB	2 SATA up to 8TB	2 SATA up to 8TB
eSata	N/A	N/A	N/A
Chasis	380 1U Chassis	380 1U Chassis	380 1U Chassis
Dimension	15.0 x 12.6 x 1.9 inch	15.0 x 12.6 x 1.9 inch	15.0 x 12.6 x 1.9 inch
Power	12 VDC 15W Max	12 VDC 20W Max	12 VDC 20W Max
Operation Temperature	-10 C to +55 C (14 F to 131 F)	-10 C to +55 C (14 F to 131 F)	-10 C to +55 C (14 F to 131 F)
Weight	1.5 kg (3.3 lb)	2 kg (4.4 lb)	2 kg (4.4 lb)
CVBS	Yes	Yes	Yes
Remote Connections	128	128	128
Dual Stream	Yes	Yes	Yes

Mounting Brackets

Wall	 HTH-258ZJ HNC-MD, HNC-TD(A)(C)	 HTH-273ZJ-135B HNC-VD(A), HAC-OD4	 HTH-273ZJ-130B-TRL HNC-XD, HAC-VD5(4)
	 HTH-272ZJ-110B HNC-MD, HNC-TD(A)(CF), HAC-FD(4)	 HTH-272ZJ-120B HNC303-WDA(C)	 HTH-273ZJ-130B HAC-ID3, HNC-IDA
	 HTH-272ZJ-110B-TRS HAC-MD	 HTH-273ZJ-140B HAC-OD4	 HTH-273ZJ-DM25 HNCA-FE(A)
Ceiling	 HTH-271ZJ-110 HNC-MD, HNC-TD(A)(C)	 HTH-271ZJ-120 HNC-WDA(C)	 HTH-271ZJ-DM25 HNCA-FE(A)
	 HTH-271ZJ-135 HNC-VD(A)	 HTH-281ZJ-DM25 HNCA-FE(A)	 HTH-271ZJ-140 HAC-OD4
Corner	 HTH-276ZJ HTH-273ZJ-135B, HTH-272ZJ-110B, HTH-273ZJ-130B-TRL, HTH-272ZJ-120B, HTH-273ZJ-110B-TRS, HTH-273ZJ-140B, HTH-273ZJ-140B, HTH-273ZJ-130B	 HTH-275ZJ HTH-273ZJ-135B, HTH-272ZJ-110B, HTH-273ZJ-130B-TRL, HTH-272ZJ-120B, HTH-273ZJ-110B-TRS, HTH-273ZJ-140B, HTH-273ZJ-140B, HTH-273ZJ-130B	 HTH-280ZJ-DM21 HNC-VD(A)
	 HTH-249ZJ HAC-OD4	 HTH-260ZJ HNC-VB(A), HNC-XB, HAC-FB8	 HTH-280ZJ-DM18 HNC-MD, HNC-TD(A)(C)
Recess	 HTH-227ZJ HNC-VD(A)	 HTH-280ZJ-M HNC-XD, HAC-VD5(4)	 HTH-280ZJ-DM25 HNCA-FE(A)
	 HTH-660ZJ PTZ Parapet Wall Mount	 HTH-602ZJ-BOX PTZ Wall Mount with electrical box	 HTH-661ZJ PTZ Ceiling Pendant Mount 1ft.
PTZ	 HTH-602ZJ PTZ Wall Mount	 HTH-602ZJ-POLE PTZ Pole Mount	 HTH-602ZJ-CORNER PTZ Corner Mount

Quadbrid DVR



	HAR314-16	HAR314-8	HAR314-4
Description	16 Ch. Quadbrid TVI DVR	8 Ch. Quadbrid TVI DVR	4 Ch. Quadbrid TVI DVR
Video Compression	H.264/H.264+	H.264/H.264+	H.264/H.264+
Audio Compression	G.711u	G.711u	G.711u
HD-TVI/AHD/Analog	16 BNC input, 1Vp-p, 75Ω	8 BNC input, 1Vp-p, 75Ω	4 BNC input, 1Vp-p, 75Ω
IP video Input	2 Channel up to 2 megapixel resolution	2 Channel up to 2 megapixel resolution	1 Channel up to 2 megapixel resolution
Video Output	1 HDMI, 1 VGA, 1 CVBS up to 4K	1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080	1 HDMI, 1 VGA, 1 CVBS up to 1920 x 1080
Recording resolution	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF CIF Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Main stream: 1080P/ 720P/ VGA/ WD1/ 4CIF/ CIF Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA
Audio Input/ Output	1 input/two way audio, 1-ch RCA output (Linear 1kΩ)	1 input/two way audio, 1-ch RCA output (Linear 1kΩ)	1 input/two way audio, 1-ch RCA output (Linear 1kΩ)
Audio Bit Rate	64kbps	64kbps	64kbps
Recording Speed	1080P Lite@30fps per Channel	1080P Lite@30fps per Channel	1080P Lite@30fps per Channel
Synchronous Playback	16	8	4
Alarm Input/ Output	N/A	N/A	N/A
Network Interface	1 RJ45 10M/ 100M adaptive Ethernet interface	1 RJ45 10M/ 100M adaptive Ethernet interface	1 RJ45 10M/ 100M adaptive Ethernet interface
USB Interface	1 USB 2.0 ; 1 USB 3.0 Interface	2 USB 2.0 interface	2 USB 2.0 interface
Communication	1 RS-485 interface	1 RS-485 interface	1 RS-485 interface
HDD Interface	2 SATA interface up to 8TB each bay	1 SATA HDD Bay up to 8TB	1 SATA HDD Bay up to 8TB
eSATA	N/A	N/A	N/A
Chasis	380mm 1U chassis	1U chassis	1U chassis
Dimension	380 × 290 × 48mm (15.0 × 11.4 × 1.9 inch)	315 × 242 × 45mm (12.4 × 9.5 × 1.8 inch)	315 × 242 × 45mm (12.4 × 9.5 × 1.8 inch)
Power	12V DC, Max 20W	12V DC, Max 20W	12V DC, Max 15W
Operation Temperature	-10 °C ~ +55 °C (14 °F ~ 131 °F) Humidity 90% or less (non-condensing)	-10 °C ~ +55 °C (14 °F ~ 131 °F) Humidity 90% or less (non-condensing)	-10 °C ~ +55 °C (14 °F ~ 131 °F) Humidity 90% or less (non-condensing)
Weight	4.1lb	3.3lb	3.3lb

3MP HD-TVI WDR Camera

HAC335D-OD4Z



HAC335D-IDZ



HAC335D-VB4Z



HAC335D-VD4Z



Description	3MP Motorized EXIR Dome	3MP Motorized EXIR Dome	3MP Motorized EXIR Bullet	3MP Motorized EXIR Eyeball
Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor
Effective Pixels	2052(H) x 1536(V)	2052(H) x 1536(V)	2052(H) x 1536(V)	2052(H) x 1536(V)
Min Illumination	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC
IR Feature	Up to 131ft	Up to 100ft	Up to 131ft	Up to 131ft
Wide dynamic Range	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120dB
OSD Manual	Built in	Built in	Built in	Built In
Shutter Time	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/25 (1/30) s to 1/50,000 s	1/30 s to 1/50,000 s
Lens	2.8-12mm @ F1.4 Motorized	2.8-12mm @ F1.4 Motorized	2.8-12mm @ F1.4 Motorized	2.8-12mm @ F1.4 Motorized
Angle of View	83° - 26.8°	83° - 26.8°	83° - 26.8°	83° - 26.8°
Digital Zoom	62x	62x	62x	62x
Communication	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC control) via DVR	OSD (UTC Control) via DVR
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
Composite Video Output	N/A	N/A	N/A	N/A
Adjustment Range	Pan: 0 - 340°, Tilt: 0 - 75°, Rotation: 0 - 355°	Pan: 0 - 355°, Tilt: 0 - 75°, Rotation: 0 - 355°	Universal Mount	Pan: 0 - 360°, Tilt: 0 - 75°, Rotation: 0 - 360°
Frame Rate	3MP @ 18fps	3MP @ 18fps	3MP @ 18fps	3MP @ 18fps
Weather Resistance	IP66, IK10	Indoor	IP66	IP66
Motion Detection	4 zones	4 zones	4 zones	4 zones
Privacy Mask	8 zones	8 zones	8 zones	8 zones
Power Consumption	Dual Volt:12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W	Dual Volt:12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W	Dual Volt: 12V DC: Max. 7W ; 24V AC: Max. 10W	12 VDC: Max. 6W
Operating Temperature	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)
	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less (non-condensing)	Humidity 90% or less
Dimension	Φ5.72" × 4.89"	Φ5.35" × 3.98"	3.62"×3.34"×3.34"	5.29"×4.88"×4.39"
Weight	3.53 lb	1.32 lb	1.98 lbs	1.57 lbs

3MP HD-TVI WDR Camera

HAC335-OD



HAC335-MB



HAC335-MD

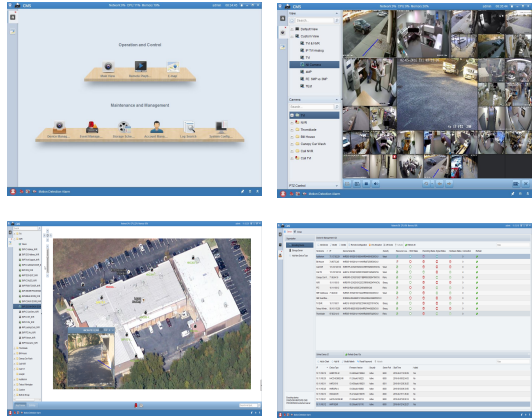


HAC335-FB4
HAC335-FD4*



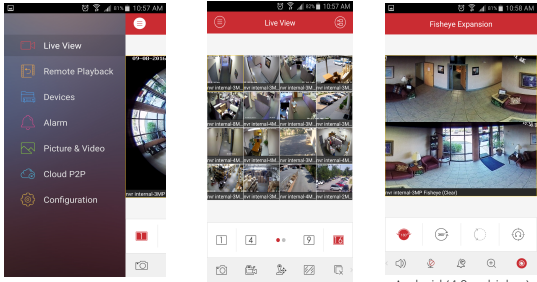
Description	3MP EXIR Vandal Dome	3MP EXIR Mini Bullet	3MP EXIR Mini Dome	1080P EXIR Bullet (Eyeball)*
Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor	3MP CMOS Image Sensor
Effective Pixels	2052(H) x 1536(V)	2052(H) x 1536(V)	2052(H) x 1536(V)	2052(H) x 1536(V)
Min Illumination	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.01 Lux @ (F1.2, AGC ON), 0 Lux with IR
Day & Night	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC	ICR, Color/ BW/ EXT, BLC
IR Feature	up to 65ft	up to 65ft	up to 65ft	up to 131ft
Wide Dynamic Range	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB
OSD Manual	Built In	Built In	Built In	Built In
Shutter Time	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s	1/30 s to 1/50,000 s
Lens	2.8mm (3.6mm Optional)	2.8mm (3.6mm Optional)	2.8mm (3.6mm Optional)	2.8mm (3.6mm Optional)
Angle of View	84° (2.8mm)	84° (2.8mm)	84° (2.8mm)	84° (2.8mm)
Digital Zoom	62x	62x	62x	62x
Communication	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR
HD-TVI Video Output	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%	1 HD-TVI out up to 1200ft with RG59U 95%
HD-TVI Over Cat6	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft	Optional UTP Balun available up to 600ft
Composite Output	N/A	N/A	N/A	N/A
Adjustment Range	Pan: 0 - 340°, Tilt: 0 - 75°, Rotation: 0 - 355°	Universal Mount	Pan: 0 - 360°, Tilt: 0 - 75°, Rotation: 0 - 360°	Universal Mount (P:0-360, T:0-75, R:0-360)*
Frame Rate	3MP @ 18fps	3MP @ 18fps	3MP @ 18fps	3MP @ 18fps
Weather Resistance	IP66, IK10	IP66	IP66	IP66
Motion Detection	4 zones	4 zones	4 zones	4 zones
Privacy Mask	2 zones	2 zones	2 zones	2 zones
Power Consumption	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 5W	12VDC +/- 10%, Max 5W
Operating Temperature	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)	-40 °C - 60 °C (-40 °F - 140 °F)
	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less
Dimension	Φ5.72"×4.9"	2.30"×2.19"×6.05"	3.58"×3.25"×2.69"	3.41"×3.23"×8.67" (4.33×3.67)*
Weight	0.77 lbs	0.82 lbs	0.77 lbs	1.5 lbs (0.77 lbs)*

Client Software (Windows and Mac Compatible) No Licensing Fee!

LIVE VIEW	Support up to 4 output screens for live view, and up to 64 cameras in live view screens	<p>Recommended Minimum Server System Requirements Intel Pentium i5 or higher Microsoft Windows XP/2003/2008/Win7/Win10 8 GB RAM, 1000 Mbps Ethernet card, 1280 x 720 pixels or higher ATI 5000/nVidia GTX260, 1GB video card or higher</p> 
ENCODING DEVICE	Up to 256 encoded devices	
DECODING DEVICE	Up to 64 decoding devices	
IMPORTED CAMERA	Up to 1024 imported cameras	
CAMERA GROUP	Up to 256 camera groups, and maximum 64 cameras in one group	
STORAGE SERVER	Up to 16 storage servers, each server's recording performance is 64*2 Mbps	
STREAM MEDIA SERVER	Up to 16 stream media server, each server is with incoming connections of 64*2 Mbps and outgoing connections of 200*2 Mbps	
PLAYBACK	Up to 16 channels playback	
DOWNLOAD	Up to 16 simultaneous download tasks	
USER	Up to 51 users per PC	
SYSTEM LOG	Unlimited	
MAP	Supports PNG, BMP, and JPEG images. Nested maps supported.	
PTZ	Control, presets, patrols, pattern supported	
DEVICE SEARCH	Supports Search Activated Device Protocol (SADP)	
DEVICE CONFIGURATION	Supports remote programming and configuration of any connected device. Features Add Device Wizard.	

Mobile Client Applications for SmartPhones and Tablets

Mobile client software can be used to monitor the live video remotely from embedded hybrid DVR, NVR, DVR recorders, IP camera, IP speed dome or DVS/encoder via wireless network.

NUMBER OF DEVICES	256 device addresses	 <p>*iPhone/iPad app must be acquired from the iTunes App Store. **Android app can be obtained at the Android Market . *Windows Phone 8 app must be acquired from the Windows Store.</p> <p>Android (4.0 or higher) Apple (iOS 7.0 or higher) BlackBerry Bold Windows Mobile</p>
LIVE VIEW	Up to 32 cameras	
REMOTE PLAYBACK	Up to 4-ch	
CONFIGURABLE IMAGE QUALITY	Clear, balanced, fluent, and customized	
FRAME RATE	Up to 30 fps (dependant on device and network)	
RESOLUTION	Up to 1080p	
STREAM TYPE	Video and audio	
PTZ CONTROL	Pan, tilt, zoom	
SNAPSHOT	Snapshot and video recording in Live View	

Standard Software is included in the compatible product packages only. No-fee policy applies to license, channel, software support agreement, and technical support access of Standard Software only.

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*Pricing Subject to Change.

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