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TVI CAMERAS

PRODUCT CATALOG



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www.accelerated-tech.com

1080P HD-TVI WDR 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	300ft
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 Camera

HAC314D-OD4



HAC314D-VB4



HAC314D-VD4



HAC314-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	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS
Effective Pixels	1930(H) x 1088(V)	1930(H) x 1088(V)	1930(H) x 1088(V)	1930(H) x 1088(V)
Min Illumination	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 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	DWDR	DWDR	DWDR	DWDR
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	2.8-12mm @ F1.4	2.8 - 12 mm @ F1.4	3.6mm (2.8mm Optional)
Angle of View	102° - 35°	102° - 35°	102° - 35°	80° (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 - 355°, 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 Volt: 12 VDC: Max. 4W; 24 VAC: Max. 5W	Dual Volt: 12 VDC: Max. 4W; 24 VAC: Max. 5W	Dual Volt: 12 VDC: Max. 4W; 24 VAC: Max. 5W	12VDC +/- 10%, Max 3W
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"	Φ5.1"×4"	3.39"×3.23"×8.67"
Weight	1.95 lbs	1.52 lbs	0.90 lbs	0.95 lbs

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

HAC314-FD4	HAC314-OD	HAC314-MD	HAC314-MB	
				
1080P EXIR Turret, Exterior	1080P IR Dome, Exterior	1080P IR Turret, Exterior	1080P IR Bullet, Exterior	Description
1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	Image Sensor
1930(H) x 1088(V)	1930(H) x 1088(V)	1930(H) x 1088(V)	1930(H) x 1088(V)	Effective Pixels
0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 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
DWDR	DWDR	DWDR	DWDR	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
80° (3.6mm)	90° (2.8mm), 80° (3.6mm)	90° (2.8mm), 80° (3.6mm)	90° (2.8mm), 80° (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 +/- 10%, Max 3W	12VDC +/- 10%, Max 3W	12VDC +/- 10%, Max 3W	12VDC +/- 10%, Max 3W	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"	Φ3.53"×2.33"	Φ2.76"×5.89"	
0.57 lbs	1.21 lbs	0.88 lbs	0.79 lbs	Dimension
				Weight

HD-TVI PTZ Camera

HAC304-MB



HAC304-BX



HAP313-IR



HAP313-O



1080P IR Bullet, Exterior	1080P BOX	Description	1080P HD-TVI IR PTZ, Exterior	1080P HD-TVI PTZ, Exterior
1/3" Progressive Scan CMOS	1/3" Progressive Scan CMOS		1/3" CMOS Image Sensor	1/3" CMOS Image Sensor
1920(H) x 1080(V)	1920(H) x 1080(V)		1920 x 1080	1920 x 1080
0.01 Lux @ (F1.2, AGC ON),	0.01 Lux @ (F1.2, 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:
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)		Image Sensor		
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			
n: 0 - 360°, Tilt: 0 - 90°				
1080P @ 30fps	1080p @ 30fps			
IP66	N/A			
4 zones	4 zones	Effective Pixels		
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			
		Min Illumination		
		Max. Image Resolution		
		Wide Dynamic Range		
		Electronic Shutter		
		Lens		
		Optical Zoom		
		Digital Zoom		
		HD Video Output		
		Park Action		
		Pan & Tilt Range		
		Pan Speed		
		Tilt Speed		
		Day/ Night		
		IR Range		
		Weather Resistance		
		RS-485		
		Power		
		Operating Temperature		
		Dimension		
		Weight		

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 @ 60fps	720P @ 60fps	720P @ 60fps	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

D	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
reset 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
via 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	24VAC, Max. 20W	24VAC, Max. 12W
	-30 °C-65°C(-22°F-149°F)	-30 °C-65°C(-22°F-149°F)	-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 availabe up to 600ft	Optional UTP Balun availabe up to 600ft	Optional UTP Balun availabe up to 600ft	Optional UTP Balun availabe up to 600ft	Optional UTP Balun availabe 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)
105×104.8×263.1mm(4.13" ×4.13" ×10.36")	94.6×83×210.8mm (3.72"×3.27"×8.30")	94.6×83×210.8mm (3.72"×3.27"×8.30")	Φ89.6 × 59.1H mm (Φ3.53" × 2.33"H)	Φ70×149.5 mm (Φ2.76" ×5.89")
1.76 lb	1.76 lb	1.54 lb	0.88 lb	0.79 lb

HAC314-VD4Z



HAC314-VB4Z



HAC314D-OD4Z



Description	1080P Motorized Vari-Focal IR Dome, Exterior	1080P Motorized Vari-Focal EXIR Bullet, Exterior	1080P Motorized Vari-Focal EXIR Turret, Exterior	Description
Image Sensor	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	1/2.7" Progressive Scan CMOS	Video Compression
Effective Pixels	1930(H) x 1088(V)	1930(H) x 1088(V)	1930(H) x 1088(V)	Audio Compression
Min Illumination	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	0.1 Lux @ (F1.2, AGC ON), 0 Lux with IR	HD-TVI/ Analog Video Input
Day & Night	ICR	ICR	ICR	IP video Input
IR Feature	up to 120ft	up to 120ft	up to 120ft	Video Output
Wide Dynamic Range	DWDR	DWDR	DWDR	Recoding resolution
OSD Manual	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	Audio Input
Lens	2.8-12mm	2.8-12mm @ F1.4	2.8 - 12 mm @ F1.4	Audio Output
Angle of View	102° - 35°	102° - 35°	102° - 35°	Audio Bit Rate
Digital Zoom	N/A	N/A	N/A	Recording Speed
Communication	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	OSD (UTC Control) via DVR	Synchronous Playback
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%	Alarm Input/ Output
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	Network Interface
Composite Output	N/A	N/A	N/A	USB Interface
Adjustment Range	Pan: 0 - 355°, Tilt: 0 - 75°	Pan: 0 - 360°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 75°	Communication
Frame Rate	1080p @ 30fps	1080p @ 30fps	1080p @ 30fps	HDD Interface
Weather Resistance	IP66, IK10	IP66	IP66	eSATA
Motion Detection	4 zones	4 zones	4 zones	Chasis
Privacy Mask	2 zones	2 zones	2 zones	Dimension
Power Consumption	12 VDC: Max. 4W	Dual Volt: 12 VDC: Max. 4W; 24 VAC: Max. 5W	Dual Volt: 12 VDC: Max. 4W; 24 VAC: Max. 5W	Power
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)	Operation Temperture
	Humidity 90% or less	Humidity 90% or less	Humidity 90% or less	
Dimension	Φ5.72"x4.9"	3.62"×3.34"×10.6"	Φ5.1"×4"	Weight
Weight	1.95 lbs	1.52 lbs	0.90 lbs	

Hidden Type Camera

HD-TVI Accessories

HAC304-HP



HAC304-HS



HKB-1100KI



PTZ/ IP/ DVR
Keyboard controller

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)

HTH-1H18



HD-TVI balun up to 600 ft.

HAC-TT-X41T



HD-TVI Testing Monitor

HAR705-16



HAR705-8



HAR504-32



HAR504-24



16 Ch. Hybrid HD-TVI/ IP DVR	8 Ch. Hybrid HD-TVI/ IP DVR	32 Ch. Hybrid HD-TVI/ IP DVR	24 Ch. Hybrid HD-TVI/ IP 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 6TB each	8 SATA interface up to 6TB each	4 SATA interface up to 6TB each	4 SATA interface up to 6TB 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

HAR505-16



HAR505-8



HAR505-4



Description	16 Ch. Hybrid HD-TVI/ IP Recorder	8 Ch. Hybrid HD-TVI/ IP Recorder	4 Ch. Hybrid HD-TVI/ IP Recorder
Video Compression	H.264	H.264	H.264
Audio Compression	G.711u	G.711u	G.711u
HD-TVI/ Analog Video Input	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	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	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	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
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	4-ch input, 1-ch two way audio, 2-ch RCA output
Audio Bit Rate	64kbps	64kbps	64kbps
Recording Speed	1080P @ 30fps per Channel	1080P @ 30fps per Channel	1080P @ 30fps per Channel
Synchronous Playback	16 Ch.	8	4
Alarm Input/ Output	16 / 4	16 / 4	16 / 4
Network Interface	1 RJ45 10M/ 100M/ 1000M adaptive Ethernet 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	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	1 RS-232, 1 RS-485, 1 RS-485 Keyboard interface
HDD Interface	4 SATA HDD Bay up to 6TB each bay	4 SATA HDD Bay up to 6TB each bay	4 SATA HDD Bay up to 6TB each bay
eSATA	1 eSATA	1 eSATA	1 eSATA
Chasis	19-inch rack-mounted 1.5U chassis	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)	445 × 390 × 70 mm (17.5 × 15.3 × 2.7 inch)
Power	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W	100 ~ 240VAC, 47 ~ 63HZ, Max. 30W
Operation Temperture	-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)
Weight	11.0 lb	11.0 lb	11.0 lb

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)
		HTH-271ZJ-110 HNC-MD, HNC-TD(A)(C)		HTH-271ZJ-120 HNC-WDA(C)		HTH-271ZJ-DM25 HNCA-FE(A)
Ceiling		HTH-271ZJ-135 HNC-VD(A)		HTH-281ZJ-DM25 HNCA-FE(A)		HTH-271ZJ-140 HAC-OD4
		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)
Corner		HTH-249ZJ HAC-OD4		HTH-260ZJ HNC-VB(A), HNC-XB, HAC-FB8		HTH-280ZJ-DM18 HNC-MD, HNC-TD(A)(C)
		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
		HTH-662ZJ PTZ Ceiling Pendant Mount 3ft.				

HAR304-16

HAR304-8

HAR304-4



16 Ch. Hybrid HD-TVI DVR	8 Ch. Hybrid HD-TVI DVR	4 Ch. Hybrid HD-TVI DVR
H.264	H.264	H.264
G.711u	G.711u	G.711u
16 BNC input, 1Vp-p, 75Ω	8 BNC input, 1Vp-p, 75Ω	4 BNC input, 1Vp-p, 75Ω
2 Channel up to 2 megapixel resolution	2 Channel up to 2 megapixel resolution	1 Channel up to 2 megapixel resolution
1 HDMI, 1 VGA 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
Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA	Sub-stream: WD1/ 4CIF/ CIF/ QCIF / QVGA
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)
64kbps	64kbps	64kbps
720P@30fps per Channel	720P@30fps per Channel	720P@30fps per Channel
16	8	4
N/A	N/A	N/A
1 RJ45 10M/ 100M adaptive Ethernet interface	1 RJ45 10M/ 100M adaptive Ethernet interface	1 RJ45 10M/ 100M adaptive Ethernet interface
2 USB 2.0 interface	2 USB 2.0 interface	2 USB 2.0 interface
1 RS-485 interface	1 RS-485 interface	1 RS-485 interface
2 SATA interface up to 6TB each bay	1 SATA HDD Bay up to 6TB	1 SATA HDD Bay up to 6TB
N/A	N/A	N/A
380mm 1U chassis	1U chassis	1U chassis
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)
12V DC, Max 20W	12V DC, Max 20W	12V DC, Max 15W
-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)
4.1lb	3.3lb	3.3lb

1080P HD-TVI WDR Camera

HAC304-VD4Z



HAC304D-OD4Z

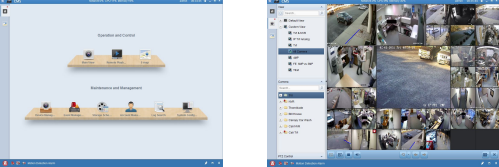


HAC304D-VB4ZH



Description	1080P Motorized Vari-Focal IR Turret, Exterior	1080P Motorized Vari-Focal IR Dome, Exterior	1080P Motorized Vari-Focal EXIR Bullet, Exterior
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 150ft	Up to 120ft	Up to 150ft
Wide dynamic Range	True WDR, 120 dB	True WDR, 120 dB	True WDR, 120 dB
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	2.8-12mm @ F1.4	2.8-12mm @ F1.4
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 - 360°, Tilt: 0 - 90°	Pan: 0 - 355°, Tilt: 0 - 90°	Pan: 0 - 360°, Tilt: 0 - 90°
Frame Rate	1080P @ 30fps	1080P @ 30fps	1080P @ 30fps
Weather Resistance	IP66	IP66/IK10	IP66
Motion Detection	4 zones	4 zones	4 zones
Privacy Mask	8 zones	8 zones	8 zones
Power Consumption	12 VDC: Max. 7W	Dual Volt: 12 VDC: Max. 4.5W ; 24 VAC: Max. 6.5W	Dual Volt: 12V DC: Max. 7W ; 24V AC: Max. 12W
Operating Temperature	-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)
Dimension	Φ130.54 × 93.24 mm (Φ5.14" × 3.67")	Φ136 × 101 mm (Φ5.35" × 3.98")	300.82 × 100.76 × 107.55mm (11.84" × 3.97" × 4.23")
Weight	0.66 lb	0.84 lb	1.54 lbs

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

LIVE VIEW	Support up to 4 output screens for live view, and upmost 64 cameras in live view screens	Minimum Server System Requirements  Intel Pentium IV 3.0 and above, Microsoft Windows XP/2003/2008/Win 7 (32-bit) 2 GB RAM, 100 Mbps Ethernet card, 1024 x 768 pixels or higher display resolution, ATI 5000/nVidia GTX260, 512 MB video card
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	Compatible Devices  Apple iOS (iPhone/iPad)* *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.
LIVE VIEW	Up to 4 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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