35 SERIES HC35TB5RxJTxx







Bi-Spectrum Thermal Bullet Cameras

Honeywell's 35 Series Bi-Spectrum Thermal Bullet Cameras simultaneously capture both heat signatures and detailed visual images of people or objects at a greater distance in low light conditions for faster response to potential threats.

In today's increasingly complex commercial landscape, the need for effective security solutions has never been greater. Bi-spectrum thermal surveillance cameras are at the forefront of this demand, offering a revolutionary approach to monitoring and protecting assets. By integrating advanced thermal imaging technologies with high-definition optical capabilities, these cameras provide unparalleled visibility in both challenging lighting conditions and diverse environments.

The camera's ability to detect heat signatures in total darkness while simultaneously verifying threats with exceptional optical clarity makes them an essential tool for businesses to enhance security measures, safeguard properties, and minimize risk for a robust return on investment.

ENHANCED DETECTION AND RECOGNITION

- Superior image quality by 5MP optical resolution and 256 x 192 thermal heatseeking resolution sensor combine in one camera device to be able to see more detail at a longer distance for earlier detection of threats.
- Multiple optical and thermal lens options to select from based on environment needs
- Optical sensor offers longer detection distance up to 143 m (469.16 ft) and recognition up to 28.6 m (93.83 ft).
- Thermal sensor can detect a human up to 417 m (1,368.11 ft) and can recognize a human up to 104 m (341.21 ft).

INTELLIGENT SURVEILLANCE

- Advanced video analytics combined with thermal heat seeking signature detect living beings, overheating equipment, smoke, fire hot spots, and open flames.
- Other analytics for vehicle detection include line crossing, double line crossing, and wrong way detection for perimeter and checkpoint applications
- Bounding boxes are displayed in live video based on object classification and alarm event

INCREASED OPERATIONAL EFFICIENCY

- 24 x 7 monitoring under all environmental conditions rain, fog, or pitch-dark night.
- Robust design with IP67,IP66 & IK10 rating enhances camera durability.
- Reduced false alarms bi-spectral noise filtering algorithms improve accuracy by filtering out noise more effectively, therefore focusing on genuine changes in the scene and minimizing false triggers and alarms
- Preventive Maintenance monitor equipment for early signs of overheating or mechanical stress, serving dual roles in industrial safety and security

COMPLIANCE

- NDAA compliant
- IEC/ANSI/ISA-62443-4-1-2018

POTENTIAL APPLICATIONS:

COMMERCIAL:

- Building Intruder / Break Ins
- Fence Line and Door Intrusion
- Server / Computer Room
- Electric Car Charging Station Monitoring

ENTERPRISE:

- Perimeter Security
- Checkpoints / Entry & Exit Points
- Utilities / Substations / CIP Flame Detection
- Datacenter / Computer Room
- Solar Panel Plants
- Combustible Material Monitoring
- Electric Car Station Monitoring

OPERATIONAL		
CAMERA	OPTICAL	THERMAL
Image Sensor	1/2.7" CMOS	Vanadium oxide uncooled focal plane detector
Sensor Size (H x V)	6.6 mm x 4.3 mm	10.5 mm x 7.4 mm
Number Of Pixels (H × V)	2880 x 1620	256 x 192
Noise Reduction	2D/3D DNR	2D/3D DNR
Lens	8 mm, F2.0	HC35TB5R1JT07: 7 mm, F1.0 HC35TB5R4JT10: 10 mm, F1.0
Angle Of View (H x V)	H: 41.6°, V: 22.7°	HC35TB5R1JT07: H: 24°, V: 18° HC35TB5R4JT10: H: 17°, V: 13°
Privacy Masking	Off / On (4 Areas)	Off / On (4 Areas)
Defog	Supported	Supported
Focus Mode	Fixed	Fixed
Min. Focusing Distance	2.5 m	HC35TB5R1JT07: 1 m HC35TB5R4JT10: 1.5 m
Image Setting	Brightness, Saturation, Sharpness, Contrast	Brightness, Sharpness, Contrast
Mirror	Normal, Horizontal, Vertical, Horizontal+Vertical	Normal, Horizontal, Vertical, Horizontal+Vertical
Scanning System	Progressive	
Minimum Illumination (Color/BW)	Color: 0.03 Lux @(F2.0, 30 IRE), B/W: 0.003 Lux @(F2.0, 30 IRE), 0 Lux with IR	
S/N Ratio	> 55 dB	
Electronic Shutter Speed	1/5 to 1/20,000 s	
IR Distance	Up to 55 m (180.4 ft)	
IR Light Control	Smart IR (Auto/Manual)/OFF	
IR Light Number	5 (4 IR + 1 white light)	
Removable IR-Cut Filter	Yes	
White Light	Strobe light	
Day/Night	Auto/Day/Night/Timing	
Backlight Compensation	WDR, HLC, BLC	
White Balance	Auto/Tungsten/Fluorescent/Daylight/Shadow/Manual	
Gain Control	0~100%	
Wide Dynamic Range	Up to 120 dB	
Pixel Pitch		12µm
Spectral Range		8~14 μm
Sensitivity (NETD)		≤ 50 Mk, F1.0
Pseudo-color Setting		White Hot, Black Hot, Rainbow, Ironbow, HSV, Bone, Cool, Copper, FireHot, Pink, Spring, Summer, Autumn, Winter, Jet, Flame, Rosebengal
Bi-spectrum Image Fusion		Supported



Part	OPERATIONAL				
Victor Standard MISCPRIL Encryption Chipset** Supported Local Storage Mcrm SD (up to 179) Alamin Inputs Orbupts Supported RSA65 Supported Fiscal Storage OPTICAL THERMAL Reset OPTICAL THERMAL Resolution Starn 1 280 x 1 200, 2560 x 1440, 2560 x 1440, 2560 x 1440, 2560 x 1280, 1290, 2560 x 1440, 2560 x 1280, 1290, 2560 x 1440, 1780 x 700 s 2010s 1780 x 700 s 2010s 1	RAM	2 x 8 Gigabits			
Encryption Chipset** Supported Surger 18 Surger 19 Supported Supp	Flash	128 Gigabits	128 Gigabits		
Local Storage	Video Standard	NTSC/PAL	NTSC/PAL		
Alamin in puts / Outputs Supported	Encryption Chipset**	Supported			
Analog Output Support	Local Storage	Micro SD (up to 1TB)			
Reset Supported	Alarm Inputs / Outputs	2 Ch Input, 2 Ch Output			
Pack	Analog Output Support	Supported			
VIDEO	RS485	Supported			
PAL NTSC Stream 1 2880 \times 1507, 2560 \times 1440, 2304 \times 1280 \times 120, 2560 \times 1440, 2304 \times 1296, 1920 \times 1080, 1580 \times 120, 2560 \times 1440, 2304 \times 1296, 1920 \times 1080, 1580 \times 1200 \times	Reset	Supported			
Stream 2880 x 1620, 2560 x 1440, 2880 x 1620, 2560 x 1440, 2304 x 1296, 1390 x 1080, 1280 x 720, 704 x 1080, 1280 x 1080, 1280 x 720, 704 x 1080, 1280 x 1080	VIDEO	OPTICAL		THERMAL	
Resolution 2880 x 1620, 2560 x 1440, 2880 x 1620, 2560 x 1440, 2804 x 1280 x 720 s 301ps 1280 x 720 x 1080, 1280 x 720, 704 x 8480 s 301ps 1280 x 720, 200kbps 1280 x 720		PAL	NTSC	PAL	NTSC
Stream 1	Resolution	2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720 @25fps Stream 2 1920 x 1080, 1280 x 720, 704	2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 1280 x 720 @ 30fps Stream 2 1920 x 1080, 1280 x 720,704	704 x 576 @25fps Stream 2 704 x 576, 352 x 288, 256 x 192	704 x 480 @30fps Stream 2 704 x 480,352 x 240, 256 x
2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 500kbps 1280 x 720, 200kbps-8000kbps 1280 x 720, 200kbps-8000kbps 1280 x 720, 200kbps-8000kbps 1280 x 720(MJPEG), 100kbps-5000kbps 1280 x 720(MJPEG), 100kbps-12000kbps 1280 x 720(MJPEG), 100kbps-12000kbps 1280 x 720, 200kbps-8000kbps 1280 x 720, 200kbps-1500kbps 1280 x	Region of Interest	8		8	
Number of Video Streams ANALYTICS OPTICAL Motion Detection, Smart Motion, Scene Change, Intrusion, Multi-Loitering, People Counter, Face Detection, Line Crossing Detection, Double Line Crossing Detection, Double Line Crossing Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection EVENTS Event Type Analytics Alarm, Security Alarm, Disk Alarm, Recording Alarm Event Linkage Email, Push Notification, SD Card Recording, Digital Output Event Event AUDIO Audio Compression G.711 a/ G.711 Mu Audio Stream 2 ANALYTICS THERMAL Motion Detection, Smart Motion, Intrusion, Multi-Loitering, People Crossing Detection, Wrong Way Detection, Smoke and Flame Detection, Double Line Crossing Detection, Wrong Way Detection, Smoker Detection, Fire Spot Detection, Wrong Way Detection, Smoker Detection, Wrong Way Detection, Wrong Way Detection, Smoker Detection, Wrong Way Detection, Wrong Way Detection, Smoke and Flame Detection, Wrong Way Detection, Way Detection, Way Detection, Way Detection, Way Detection, Way Detection	Bit Rate	2880 x 1620, 2560 x 1440, 2304 x 1296, 1920 x 1080, 500kbps- 12000kbps 1280 x 720, 200kbps-8000kbps 1920 x 1080 (MJPEG), 500kbps-8000kbps 1280 x 720(MJPEG), 100kbps-5000kbps Stream 2 1920 x 1080, 500kbps-12000kbps 1280 x 720, 200kbps-8000kbps 704 x 576(PAL)/704 x 480(NTSC), 100kbps-6000kbps 640 x 480, 10kbps-3000kbps 704 x 576(PAL)/704 x 480(NTSC) (MJPEG), 100kbps-5000kbps		$704 \times 576 (PAL)/704 \times 480 (NTSC), 100 kbps-3000 kbps \\ 704 \times 576 (PAL)/704 \times 480 (NTSC) (MJPEG), 100 kbps-3000 kbps \\ \textbf{Stream 2} \\ 704 \times 576 (PAL)/704 \times 480 (NTSC), 100 kbps-3000 kbps \\ 352 \times 288 (PAL)/352 \times 240 (NTSC), 100 kbps-1500 kbps \\ 256 \times 192, 10 kbps-1500 kbps \\ 352 \times 288 (PAL)/352 \times 240 (NTSC) (MJPEG), 10 kbps-1500 kbps \\ 704 \times 576 (PAL)/704 \times 480 (NTSC) (MJPEG), 100 kbps-3000 kbps \\ \end{cases}$	
ANALYTICS OPTICAL Motion Detection, Smart Motion, Scene Change, Intrusion, Multi-Loitering, People Counter, Face Detection, Line Crossing Detection, Double Line Crossing Detection, Unattended Object Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection, Missing Object Detection, Wrong Way Detection, Smoker Detection, Fire Spot Detection, Wrong Way Detection, Smoker D	Video Compression	H.265 / H.264 / MJPEG, Smart Co	dec	H.265 / H.264 / MJPEG, Smart Codec	
Wideo Analytics* Wotion Detection, Smart Motion, Intrusion, Multi-Loitering, People Counter, Face Detection, Line Crossing Detection, Smart Motion, Intrusion, Multi-Loitering, People Counter, Line Crossing Detection, Double Line Crossing Detection, Wrong Way Detection, Smoke and Flame Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame Detection, Fire Spot Detection, Smoker Detection, Fire Spot Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Smoker Detection, Provided National Provided Na	Number of Video Streams	2		2	
Video Analytics*Multi-Loitering, People Counter, Face Detection, Line Crossing Detection, Double Line Crossing Detection, Unattended Object Detection, Missing Object Detection, Wrong Way Detection, Smoke and Flame DetectionMotion Detection, Smart Motion, Intrusion, Multi-Loitering, People Counter, Line Crossing Detection, Double Line Crossing Detection, Wrong Way Detection, Smoker Detection, Fire Spot Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Smoker Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Smoker Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Wrong Way Detection, Smoker Detection, Smoker Detection, Smoker Detection, Smoker Detection, Wrong Way Detection, Smoker Detectio	ANALYTICS	OPTICAL		THERMAL	
Event Type Analytics Alarm, Security Alarm, Disk Alarm, Recording Alarm Event Linkage Email, Push Notification, SD Card Recording, Digital Output Event Event notification using digital output SMTP and MicroSD card AUDIO Audio Compression G.711 a/ G.711 Mu Audio Stream 2 way, Full duplex	Video Analytics*	Multi-Loitering, People Counter, Face Detection, Line Crossing Detection, Double Line Crossing Detection, Unattended Object Detection, Missing Object Detection, Wrong Way Detection, Smoke and		Counter, Line Crossing Detection, Dou	ble Line Crossing Detection, Wrong
Event Linkage Email, Push Notification, SD Card Recording, Digital Output Event Event notification using digital output SMTP and MicroSD card AUDIO Audio Compression G.711 a/ G.711 Mu Audio Stream 2 way, Full duplex	EVENTS				
Event Event notification using digital output SMTP and MicroSD card AUDIO Audio Compression G.711 a/ G.711 Mu Audio Stream 2 way, Full duplex	Event Type	Analytics Alarm, Security Alarm, Dis	k Alarm, Recording Alarm		
AUDIO Audio Compression G.711 a/ G.711 Mu Audio Stream 2 way, Full duplex	Event Linkage	Email, Push Notification, SD Card Recording, Digital Output			
Audio Compression G.711 a/ G.711 Mu Audio Stream 2 way, Full duplex	Event	Event notification using digital output SMTP and MicroSD card			
Audio Stream 2 way, Full duplex	AUDIO				
	Audio Compression	G.711 a/ G.711 Mu			
Audio Interface 1Ch Input, 1Ch Output, Built-in Mic	Audio Stream	2 way, Full duplex			
	Audio Interface	1Ch Input, 1Ch Output, Built-in Mid			



^{*}For specific usage and limitation, please refer to the user guide.
**For detailed encryption information, please refer to the A&E documents.

THERMAL TEMPERATU	RE MEASUREMENT*
Measurement Range	-20 °C ~ 150 °C (-4 °F ~ 302 °F)
Measurement Accuracy	±8 °C
Measurement Mode	Spot/Line/Area
Measurement Configuration	3 temperature measurement rule types, 20 rules in total, 1 full screen, 19 others (spot, areas, line)
Temperature Alarm	Support temperature difference alarm, threshold alarm, temperature section alarm, temperature raise alarm
NETWORK	
Ethernet	10 Base-T/100 Base-TX Ethernet (RJ-45)
Supported Web Browsers	Microsoft Edge, Chrome
Supported OS	Microsoft Windows 10, Windows 11
Protocols*	IPv4, IPv6, TCP/IP, HTTP, HTTPS, UPnP, RTSP/RTP/RTCP, IGMP, SMTP, DHCP, NTP, DNS, DDNS, QoS, SNMP, 802.1X, UDP, ICMP, ARP, TLS, FTP/SFTP, Bonjour
Interoperability	ONVIF Profile G/S/T/M
Maximum Users Access	10 Users
Security	User account and password protection, HTTPS, IP Filter, Digest authentication, TLS1.2&1.3, Stream encryption, AES128 / 256, SSH / Telnet closed, PCIDSS compliance, encryption Chipset Built-In
Secure Boot	Supported
Languages Supported	Arabic, Chinese (Traditional), Czech, Dutch, English, French, German, Italian, Japanese, Korean, Polish, Portuguese (Brazil), Spanish, Turkish
ELECTRICAL	
Power Supply	DC12V/DC24V/PoE (IEEE 802.3 af)
Power Consumption (Max)	Max. 11 W
MECHANICAL	
Dimensions	Adjustable 275.4 ~ 305.4 × 120.5 × 122.7mm (10.84" ~ 12.02") × 4.74 " × 4.83")
Package Dimensions	370 × 160 × 160 mm (14.57" x 6.3" x 6.3")
Product Weight	1.44 kg (3.17 lb)
Package Weight	1.82 kg (4.01 lb)
Body Material	Metal + Plastic
Color	RAL 9003, Black
ENVIRONMENTAL	
Operating Temperature	-40 °C to 60 °C (-40 °F to 140 °F)
Relative Humidity	Less than 90%, non-condensing
Ingress Protection	IP66, IP67
Impact Resistance	IK10 (Housing only)
REGULATORY	
Emissions	FCC PART 15, CE (EN 55032), ICES-003, Complies with RCM and UKCA
Immunity	CE(EN 50130-4, EN 55035), Complies with RCM and UKCA
Safety	CE(EN 62368-1), Complies with RCM and UKCA
RoHS	CE(EN 63000),UAE(Cabinet Decree No.10 of 2017)
RoHS Country of Origin	CE(EN 63000),UAE(Cabinet Decree No.10 of 2017) Vietnam

 $[\]star$ Some development may be required in specific user cases to support some of these protocols in the field as they mature over time.



DORI-OPTICAL* (EN62676-4 STANDARD)		
Detect	143 m (469.16 ft)	
Observe	57.2 m (187.66 ft)	
Recognize	28.6 m (93.83 ft)	
Identify	14.3 m (46.92 ft)	

^{*}The table is for reference only. The detection value is a theoretical value and may differ from the actual detection value. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

DRI-THERMAL* (JOHNSON CRITERIA**)		
	HC35TB5R1JT07	HC35TB5R4JT10
Detect (Human: 1.8 × 0.5 m)	292 m (958.01 ft)	417 m (1,368.11 ft)
Detect (Vehicle: 4 × 1.5 m)	894 m (2,933.07 ft)	1,278 m (4,192.91 ft)
Recognize (Human: 1.8 × 0.5 m)	73 m (239.5 ft)	104 m (341.21 ft)
Recognize (Vehicle: 4 × 1.5 m)	224 m (734.91 ft)	319 m (1,046.59 ft)
Identify (Human: 1.8 × 0.5 m)	36 m (118.11 ft)	52 m (170.6 ft)
Identify (Vehicle: 4 × 1.5 m)	112 m (367.45 ft)	160 m (524.93 ft)

^{*}The table is for reference only. The detection value is a theoretical value and may differ from the actual detection value. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

**The Johnson Criteria is the standard that is used for DRI (Detection, Recognition, and Identification). It is calculated based on how many pixels are

- Detection: 2 vertical pixels of the target are visible
- Recognition: 8 vertical pixels of the target are visible
- Identification: 14 vertical pixels of the target are visible



Image source: Honeywell camera test image

necessary in order to make an accurate evaluation of your object. The values are as follows:

DETECTION RANGE-OPTICAL*		
	HC35TB5R1JT07	HC35TB5R4JT10
VA Detection Distance (Face: 0.15 × 0.25 m)	9~10 m (29.53~32.81 ft)	9~10 m (29.53~32.81 ft)
VA Detection Distance (Human: 1.8 × 0.5 m)	9~38 m (29.53~124.67 ft)	9~38 m (29.53~124.67 ft)
VA Detection Distance (Front/Rear of Vehicle: 4 × 1.5 m)	Up to 195 m (up to 639.76 ft)	Up to 195 m (up to 639.76 ft)
Smoke and Flame Detection (Object: 1.2 × 0.65 m)	4 m (13.12 ft)	4 m (13.12 ft)

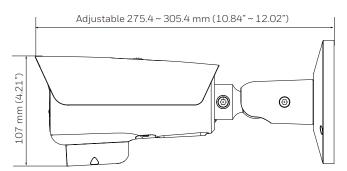
^{*}The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

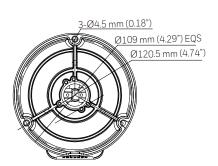
DETECTION RANGE-THERMAL*		
	HC35TB5R1JT07	HC35TB5R4JT10
VA Detection Distance (Human: 1.8 × 0.5 m)	10~32 m (32.81~104.99 ft)	11~38 m (36.09~124.67 ft)
VA Detection Distance (Front/Rear of Vehicle: 4 × 1.5 m)	Up to 140 m (up to 459.32 ft)	Up to 210 m (up to 688.98 ft)
Smoker Detection	8~15 m (26.25~49.21 ft)	11~18 m (36.09~59.06 ft)
Fire Detection (Object: 0.16 × 0.16 m)	25 m (82.02 ft)	30 m (98.43 ft)

^{*}The table is for reference only. The distances within it are subject to actual conditions including atmospheric conditions, target size, the installation site, and more.

DIMENSIONS







SYSTEM COMPATIBILITY & RECOMMENDED ACCESSORIES

SYSTEM COMP	ATIBILITY*
MAXPRO NVR HE	Up to 256 IP channels RAID5/6 enterprise NVR
MAXPRO NVR PE	Up to 192 IP channels RAID5/6 enterprise NVR
MAXPRO NVR SE	Up to 96 IP channels system NVR
MAXPRO NVR XE	Up to 24 IP channels system NVR
MAXPRO NVR Software	Up to 256 IP channels recording software
ADPRO NVR iFT-E**	Up to 32 IP channels with up to 32 VA channels NVRs
ADPRO NVR iFT**	Up to $32\ \text{IP}$ channels or 16 IP channels with up to 16 VA channels NVRs
ADPRO NVR eFT-S**	Up to 16IP channels or 8IP channels with up to 8VA channels NVRs
ADPRO NVR iFT Gateway**	4 IP channels + 4 VA channels
Honeywell DVM**	Supported with Honeywell DVM 800
35 Series NVR	4/8/16/32/64-channel 35 series NVRs

OPTIONAL MOUNTS AND ACCESSORIES***		
HA35PCM04B	35S cap for pendent mount, 1.5NPT male	
HA35CLM01	35S ceiling mount base with adapter	
HA35CLM02	35S ceiling mount pendent extension, 252 mm	
НА35ЈСВНВВ	35S bullet junction box , IP66	
HA35PLM01	35S pole mount bracket	
HA35CNM01	35S corner mount bracket	
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^{***}Mounting accessories are not included with camera and must be ordered separately. Please refer to the cross reference matrix or accessories datasheet for detailed information.

ORDERING

PART NUMBER	DESCRIPTION
HC35TB5R1JT07	35 Series Bi-Spectrum Thermal Bullet Cameras with 7 mm Thermal Lens, PoE
HC35TB5R4JT10	35 Series Bi-Spectrum Thermal Bullet Cameras with 10 mm Thermal Lens, PoE



For more information

buildings.honeywell.com/security

Building Automation

Commercial Security 715 Peachtree St. NE Atlanta, GA 30308 1.800.323.4576 www.honeywell.com ONVIF and the ONVIF logo are trademarks of ONVIF Inc. HEVC Advance logo is a trademark of HEVC Advance. Honeywell reserves the right, without notification, to make changes in product design or specifications.



 $^{^\}star When it is used with the camera, ADPRO, DVM or 35 Series NVRs will consume 2 channels and MAXPRO will consume 1 license.$

^{**}Limited features are supported for compatibility. Please refer to the Integration Matrix for detailed information.