

HVCT CAMERAS

Thermal & Optical Body Temperature Detection

The Honeywell HVCT-D4010I, HVCT-B4010I and HVCT-B4020I Thermal & Optical IR Network Cameras combine the world-class imaging technology and cameras technology with innovative IP networking technology. They help to quickly identify people who have a high body temperature using a non-contact method.

The Honeywell HVCT cameras feature two camera modules. One is visible light module, which provides 4MP high-resolution video. The second is a thermographic module, which measures the temperature of human body with high precision in real-time, therefore helping users to quickly identify people having abnormal body temperature using a non-contact method.

The HVCT Cameras built-in visible light module, supports 4MP video, H.265 / H.264 high efficiency compression, PoE power over Ethernet and ONVIF protocol. It provides can provide high quality image even in a limited bandwidth environment. They come with a fixed focus lens and infrared LEDs for a distance up to 50 meters. With day and night mode switching, it can provide clear black and white images in low light or all-black environment.

Honeywell HVCT Cameras support video fusion view, which can help thermal video to show richer image details. The Temperature measurement rules and its actual values of the thermal video can also be superimposed on the visible light video. It's convenience for users to monitor all the information in one place.

MARKET OPPORTUNITIES

The Honeywell HVCT Cameras are specially designed for all kinds of security and noncontact human body temperature measurement application. they can be widely used in buildings, factories, customs, schools, hospitals and etc



HVCT-D4010I



HVCT-B4020I



HVCT-B4010I



HVCT-ABKD
(BLACKBODY)

FEATURES



Uncooled 160x120 or 384x288
Temperature Range 30°C ~45°C
Temperature Accuracy $\pm 0.5^{\circ}\text{C}$,
 $\pm 0.3^{\circ}\text{C}$ (with black body)
Support video fusion view and
pseudo color overlay



Secondary 4MP visible camera
True WDR, 120dB
Up to 50m IR Distance
25fps @ 2688 x 1520
Support abnormal temperature alarm



Support user-defined point, line and
frame temperature measurement
rules
IP66 Protection
ONVIF
PoE/ DC12V

HVCT BODY TEMPERATURE DETECTION CAMERAS

Technical Specifications

THERMAL MODULE

Part Number	HVCT-D4010I	HVCT-B4010I	HVCT-B4020I
Type	Ball	Bullet	
Lens	6mm, F1.1	15mm, F1.0	
Field of View (H x V)	25° x 18.7°	24.5° x 18.5°	
Image sensor	Vanadium Oxide uncooled FPA (Focal Plane Arrays)		
Resolution	160 x 120	384 x 288	
Pixel Size	17µm		
Spectral Range	8µm ~ 14µm		
Sensitivity (NETD)	≤40mK (@25°C, F#=1.1)	≤35mK (@25°C, F#=1.0)	
Pseudo Color	White hot, Black hot, Iron red and etc. Up to 15 pseudo color optional		

TEMPERATURE MEASUREMENT

Range	30°C~45°C (86°F~113°F)
Accuracy	±0.5°C / (±0.3°C with blackbody)
Measurement	Support full image area temperature measurement, or user-defined measurement points (max. 10), areas (max. 10) and line (max. 1)
Temperature Alarm	Strobe light alarm and audio alarm

VISIBLE CAMERA

Part Number	HVCT-D4010I	HVCT-B4010I	HVCT-B4020I
Focal Length	8mm Fixed lens	6mm Fixed lens	
Field of View (H x V)	39.42° x 22.14°	51.7° x 28°	
IR Range (up to)	15m	40m	50m
Shutter Speed	1 ~ 1/100,000s		
Day / Night	IR Cut Filter		
WDR	120 dB		
Minimum Sensitivity	Color: 0.008Lux@F1.6(AGC ON) B/W: 0.001Lux@F1.6(AGC ON); 0Lux(IR ON)		

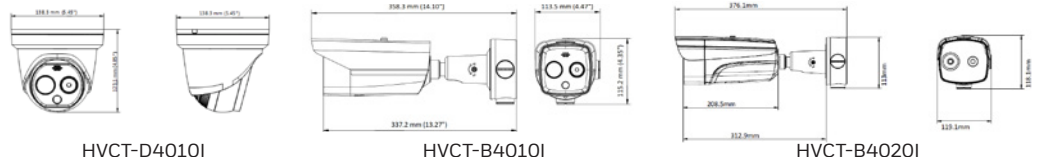
IMAGE FUSION

Video Image Fusion	Overlay details of visible light video in thermographic video
Picture in Picture	Overlay thermographic video to visible light video with picture-in-picture mode
Temp. Info Overlay	Overlay temperature measurement rules and result in visible light video

AUDIO & VIDEO CODEC

Video Compression	H.265/ H.264/ MJPEG
Main Stream	Visible Light: 25fps @ 2688 x 1520, 1920 x 1080, 1280 x 720 Thermographic: 25fps @ 1280 x 720, 704 x 576, 640 x 480, 352 x 288, 320 x 240
Sub Stream	Visible Light: 25fps @ 704 x 576, 352 x 288, 176 x 144 Thermographic: 25fps @ 704 x 576, 352 x 288, 320 x 240
H.265 Type	Main Profile
H.264 Type	Baseline Profile/ Main Profile / High Profile
Video Bit Rate	32Kbps~8Mbps
Audio Compression	G.711u/G.711a/G.722.1/MP2L2/G.726/PCM
Audio Bit Rate	64Kbps(G.711) / 16Kbps(G.722.1) / 16Kbps(G.726) / 32~192Kbps (MP2L2)

DIMENSIONS



For more information
www.security.honeywell.com

Honeywell Commercial Security
 715 Peachtree St. NE
 Atlanta, GA 30308
 1.800.323.4576
www.honeywell.com

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NETWORK

Protocols	IPv4/IPv6, HTTP, HTTPS, 802.1x, Qos, FTP, SMTP, UPnP, SNMP, DNS, DDNS, NTP, RTSP, RTP, TCP, UDP, IGMP, ICMP, DHCP, PPPoE
ONVIF	ONVIF
Web Browser	IE9 or above
Live View	20 channels
Security	Password protection, MAC address binding, HTTPS encryption, IEEE 802.1X Authentication, IP address filter

INTERFACES

Network	1 x RJ45, 10M/100M self-adaptive Ethernet port
RS-485	1 x RS485
Alarm (In / Out)	2 / 2 (1 / 1 for HVCT-D4010I)
Video Output	1x BNC
Audio	1 x Audio input (3.5mm) / 1 x Audio out
Micro SDCard slot	up to 128 GB (256GB for HVCT-B4020I)
Reset Button	Support

ENVIRONMENTAL

Part Number	HVCT-D4010I	HVCT-B4010I	HVCT-B4020I	HVCT-ABKD
IP Rating	IP66			
Humidity	95% max			
Operating Temp.	-20~50°C (-4~122°F)	-10~35°C (14~95°F)	0~40°C (32~104°F)	
Temp. Resolution	N/A			0.1°C (0.18°F)
Temp. Accuracy	N/A			±0.1°C (0.18°F)

PHYSICAL CHARACTERISTICS

Part Number	HVCT-D4010I	HVCT-B4010I	HVCT-B4020I	HVCT-ABKD
Power Supply	12V DC (± 20%)	18~30V AC or 9~15V DC		100~240V AC
PoE	802.3af, class 3			N/A
Consumption	6.5W	8W	9.5W	20W
Weight	940g / 2.07lb	1.76kg / 3.88lb	1.82kg / 4.01lb	1.85kg / 4.08lb
Size (HxWxD) Inches	4.85 x 5.45 x 5.45	4.54 x 4.47 x 14.11	4.65 x 4.69 x 14.8	4.72 x 4.71 x 6.95

ORDERING INFORMATION

HVCT-D4010I-6	Thermal & Optical IR Fixed Ball Network Camera, Thermographic Module: Uncooled 160x120, 6mm Lens, Temperature Range 30°C ~ 45°C, Temperature Accuracy ±0.5°C (±0.3°C with Blackbody); Visible Light Module: 1/2.7" CMOS, 8mm lens, H.265/ H.264/ MJPEG, 25fps @ 2688 x 1520,TDN, 120dB WDR, support 128GB on-board storage, ONVIF, IP66, 12VDC/ PoE
HVCT-B4010I-6	Thermal & Optical IR Bullet Network Camera, Thermographic Module: Uncooled 160x120, 6mm Lens, Temperature Range 30°C ~ 45°C, Temperature Accuracy ±0.5°C (±0.3°C with Blackbody); Visible Light Module: 1/2.7" CMOS, 8mm lens, H.265/ H.264/ MJPEG, 25fps @ 2688 x 1520,TDN, 120dB WDR, support 128GB on-board storage, ONVIF, IP66, 12VDC/ PoE
HVCT-B4020I-15	Thermal & Optical IR Bullet Network Camera, Thermographic Module: Uncooled 384x288, 15mm Lens, Temperature Range 30°C ~ 45°C, Temperature Accuracy ±0.5°C (±0.3°C with Blackbody); Visible Light Module: 1/2.7" CMOS, 6mm lens, H.265/ H.264/ MJPEG, 25fps @ 2688 x 1520,TDN, 120dB WDR, support 256GB on-board storage, ONVIF, IP66, AC/ DC/ PoE
HVCT-ABKD	Blackbody for temperature measurement calibration, radiation source temperature+5°C (9°F)~50°C (122°F) adjustable, temperature resolution 0.1°C, temperature accuracy ±0.1°C, effective emissivity 0.97±0.02, effective radiation Φ70 mm, 100~240V AC

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