



# CHeKT Dual Thermal AI IP Camera



## Dual Thermal AI IP Camera

- Visible: 5 MP, Thermal: 640X480 (Upscaling)
- H.265, H.264 and MJPEG Compression
- Embedded CHeKT AI Video Technology
- Deep Learning - Object Detection Classification
- SMART Bitrate Control and Region of Interest
- AI Object Detection: Visible or Thermal Lens

### Product Features

#### AI Analytics Engine



CHeKT's advanced tracking algorithm with rich library of detection behaviors

#### Central Station Integration



AI video alarm signal transmission when using the OPTEX Video Bridge

#### Deep Learning Object



Deep learning based object identification (as Person, Cyclist, Car, Van, Truck, Motorcycle, Bicycle, Bag) removes false object detection

#### Detection Zones/Rules



40 rules & zones (Multi-segment Polygons and Lines) as standard

#### Detection Behavior



Enter, Exit, Appear, Direction, Dwell filter, Tailgating, Area Line Detection

#### Deep Learning People



Deep learning based on people identification and tracking

# Specifications

## CAMERA

<b>Model</b>	CKIPAI5MP-DL-TH-FR	
	<b>Visible</b>	<b>Thermal</b>
<b>Image Sensor</b>	SONY STARVIS EXMOR 1/2.8" 5M CMOS	Uncooled Vanadium Oxide Microbolometer
<b>Pixel Size</b>	-	12 μm
<b>Spectral Response</b>	-	7.8~14 μm
<b>NETD</b>	-	65mK(Typical), Less than 100mK(max) @ 25°C
<b>AGC Control</b>	Auto	-
<b>IRIS Type</b>	Auto Exposure	-
<b>Minimum Illumination</b>	Color: 0.16 Lux, B/W : 0 Lux (IR LED On)	-
<b>Lens</b>	4.0 mm( F2.0)	4.0 mm( F1.0)
<b>Angle of View</b>	Horizontal: Approx. 82.3°, Vertical: Approx. 58.8°	Horizontal: Approx. 56°, Vertical: Approx. 42°
<b>Shutter Time</b>	Auto / Manual: 1/30 ~ 1/32,000, Anti-Flicker, Slow Shutter (1/2,1/3,1/5,1/6,1/7.5,1/10 )	-
<b>Day &amp; Night</b>	True Day & Night (Removable IR -cut filter)	-
<b>Wide Dynamic Range</b>	True WDR, 120 dB or above	-
<b>Detectable Temperature Range</b>	-	-40°C to 330°C(-40°F to 626°F)
<b>Temperature Accuracy</b>	-	The greater of ±5°C or 5% between 5°C to 140°C scene temperatures . Typical performance of ±10% between 140°C to 330°C scene temperatures . Specified at nominal 25°C ambient operating temperature and nominal measurement distance of 12 inches from blackbody. Temperature reported is Center Spot temperature, which is an average of the center 36 pixels.

## IR ILLUMINATOR

<b>IR LED</b>	High Power IR LED x 2	-
<b>IR Working Distance</b>	30m	-

## VIDEO

<b>Video Compression</b>	H.265, H.264, MJPEG	
<b>Profile</b>	H.264 : MP / HP H.265 : MP	
<b>Multiple Profile Streaming Performance</b>	2592x1944/30 + 720p30 with H.264,H265 + MJPEG	640x480/9 + 320x240/9 with H.264,H265 + MJPEG
<b>Max Resolution</b>	2592 x 1944 /30fps	640 x 480( Upscaling)/9fps
<b>Video Bit Rate</b>	100Kbps ~ 25Mbps, Multi-rate for Preview and Recording	
<b>Bitrate Control</b>	Multi Streaming CBR/VBR(Controllable frame rate and Bandwidth)	
<b>Noise Reduction</b>	3D-DNR	-
<b>Privacy Mask</b>	16 programmable zones	
<b>Special Features</b>	SMART Bitrate Control , Region of Interest	
<b>Other Image Processing</b>	Configurable Exposure, White Balance, Sharpness	-
<b>Image Orientation</b>	Flip / Mirror / Corridor Mode	
<b>Analogue Output</b>	1 (Installation only) , CVBS 1.0V p-p (75Ω), 4:3 aspect ratio (Camera selectable)	

## AUDIO

<b>Audio Streaming</b>	Two way
<b>Audio Compression</b>	G.711 u-law 8KHz, AAC-LC 48Kbps at 8K Hz
<b>Audio input</b>	Supply voltage : 3VDC(3mA), Input impedance : 3K Ohm
<b>Audio output</b>	Line Out, MAX. Output Level : 1Vrms

## EVENT

<b>Event Trigger</b>	Motion Alarm, DI, Temperature Alarm(Above, Below, Slope Rate) , VCA(AI)
<b>Pre-Post Recording</b>	Pre: 1~5 sec Post: 1~240 sec
<b>Event Notification</b>	FTP, E-mail, Alarm-out, SD card

## NETWORK

<b>Ethernet Standard</b>	10/100 Base-T
<b>IP</b>	IPv4
<b>Protocol</b>	TCP/IP, UDP, AutoIP, RTP(UDP/TCP), RTSP, NTP, HTTP, HTTPS, SSL, DNS, DDNS, DHCP, FTP, SMTP, ICMP, SNMPv1/v2/v3(MIB-2), ONVIF
<b>Security</b>	HTTPS(SSL), IP filtering, 802.1x, Digest Authentication
<b>Plug In</b>	ONVIF Profile S, CGI API

## GENERAL

<b>Material</b>	Aluminum Die-casting , White
<b>External I/O Terminals</b>	1 x Alarm In / 1 x Alarm Out
<b>Language on webpage</b>	English
<b>Power Source</b>	DC12V, PoE(IEEE 802.3af)
<b>Power Consumption</b>	DC12V Max 23.3W, PoE Max 11.5W
<b>Operating Conditions</b>	Humidity 10 ~ 90% RH (non-condensing) [PoE] -30°C ~ 50°C ( -22°F ~ 122°F) [DC12V] -40°C ~ 50°C ( -40°F ~ 122°F )
<b>Approvals</b>	FCC, CE, UKCA, IP67, IK09
<b>NDAA</b>	Compliant
<b>Weight</b>	1.08 kg
<b>Dimensions</b>	106mm(W) x 96.7mm(H) x 216mm(D)

## EDGE STORAGE

<b>Storage</b>	1 x microSD / microSDHC / microSDXC (card not included)
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## Thermal Detection Range

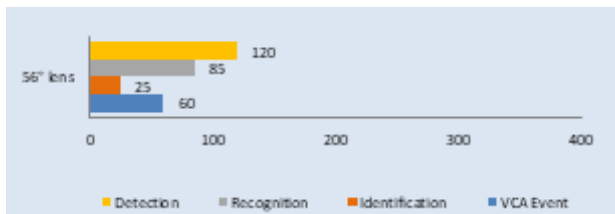
\*The detection range is of maximum values.

(Unit: meter)

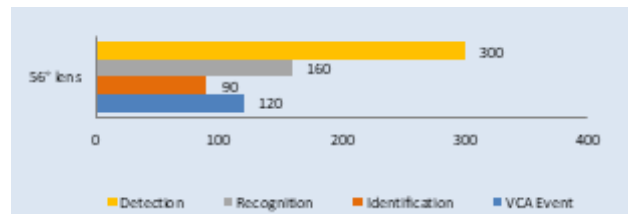
Thermal				
Object	Detection	Recognition	Identification	VCA Event
Person	120	85	25	Max. 60
Vehicle	300	160	90	Max. 120

Specifications & designs are subject to change without prior notice.

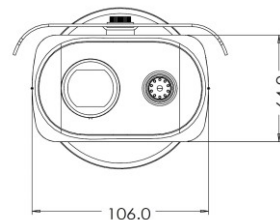
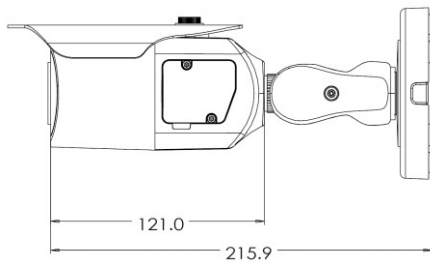
Person



Vehicle



Dimensions (Unit: mm)



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