



Network

BOX

## TNB-9000

8K Box Camera



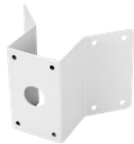
### Key Features

- 43.3mm full-frame CMOS Image Sensor
- Max. 15fps@8K, 20fps@24MP, 30fps@15MP, 60fps@4K
- Compatible with Canon EF mount Lens
- Intelligent video analytics based on AI (Object detection/classification, Attribute, BestShot)
- HDMI (1080p 30fps) Video Output
- H.265/H.264 : Main/High, MJPEG
- Single Micro SD slot (Up to 256GB)
- WiseStream II support
- RJ-45, SFP slot(100/1000Mbps)
- HPoE(IEEE802.3bt, Class5), 12VDC

### Compatible Devices



SHB-9000H



SBP-300KMW



SBP-300NBW

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### Specifications

#### Video

Imaging Device	Size	Diagonal 43.3mm Full-frame
	Type	CMOS
Resolution	7680x4320, 7360x4128, 6016x4008, 6016x3384, 5472x3648, 4768x3184, 4608x2592, 3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360	
Max. Framerate	H.265/H.264	15fps@32MP(8K)(Mode 0) / 20fps@24MP(Mode 1) / 30fps@15MP(Mode 2) / 60fps@8MP(4K)(Mode 3)
Min. Illumination (Lux)	Color(1/30sec, 30IRE)	0.015
	BW(1/30sec, 30IRE)	0.0015
Video Out	HDMI: 1080p@30/25fps(60/50Hz)	

#### Lens

Focus Control	Simple focus	
Lens Type	Canon EF mount	
Mount Type	Canon EF mount	
Optional Lens	Canon 24mm f1.4L Auto-Iris (EF 24mm f/1.4L II USM), Canon 35mm f1.4L Auto-Iris (EF 35mm f/1.4L II USM), Canon 50mm f1.4 Auto-Iris (EF 50mm f/1.4 USM), Canon 85mm f1.2L Auto-Iris (EF 85mm f/1.2L II USM), Canon 100mm f2.0 Auto-Iris (EF 100mm f/2 USM), Canon 70-200mm f2.8L Auto-Iris Vari Focal (EF 70-200mm f/2.8L USM)	

#### Operational

Day & Night	Auto(ICR)	
Backlight Compensation	BLC, DWDR	
Digital Noise Reduction	SSNR V	
Motion Detection	Quantity	8ea
	Shape	8point Polygonal zones
Privacy Masking	Quantity	6ea
	Shape	Rectangular zones
	Color / Option	Gray, Black, White
Gain Control	Low, Middle, High	
White Balance	ATW, AWC, Manual, Indoor, Outdoor	

## Operational

Electronic Shutter	Mode	Minimum, Maximum, Anti flicker
	Speed Range	1/5~1/12,000sec
Digital PTZ		Support
Alarm Interface	In/Out	Input 1ea, Output 1ea
Alarm Triggers		Analytics, Network disconnect, Alarm input
Alarm Events When Alarm Trigger Occurred		File upload(image): e-mail/FTP, Notification: e-mail, Recording: SD/SDHC/SDXC or NAS recording at event triggers,Alarm output, Handover: PTZ preset
Audio In		Selectable(mic in/line in)
Audio Out		Line out

## Analytics

Classified Object Type		Person, Face, Vehicle, License plate
Attributes	Person	Upper/Lower clothes color, Gender, Bag
	Vehicle	Type(car, bus, truck, motorcycle, bicycle), Color
	Face	Age, Gender, Glasses
Thumbnail		BestShot
Analytics Events	Based on AI Engine	Object detection, Virtual line(Crossing/Direction), Virtual area(Loitering/Intrusion/Enter/Exit)
	Normal	Defocus detection, Motion detection, Tampering, Audio detection, Sound classification, Virtual area(Appear/Disappear)

## Network

Ethernet		Metal shielded RJ-45(10/100/1000BASE-T), SFP
Video Compression		H.265/H.264: Main/High, MJPEG
Audio Compression		G.711 u-law /G.726 selectable,G.726(ADPCM) 8kHz,G.711 8kHz, G.726: 16kbps,24kbps,32kbps,40kbps, AAC-LC: 48kbps at 16kHz
Smart Codec		Manual, WiseStream II
Bitrate Control		H.265/H.264: CBR or VBR, MJPEG: VBR
Streaming	Unicast	Up to 6 users
	Multicast	Support
	Multiple Streaming	Up to 3 profiles
Protocol		IPv4, IPv6, TCP/IP, UDP/IP, RTP(UDP), RTP(TCP), RTCP, RTSP, NTP, HTTP, HTTPS, SSL/TLS, DHCP, FTP, SMTP, ICMP, IGMP, SNMPv1/v2c/v3(MIB-2), ARP, DNS, DDNS, QoS, UPnP, Bonjour, LLDP
Application Programming Interface	ONVIF	S, G, T
	Others	SUNAPI(HTTP API)

## Security

User authentication	Digest authentication
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## Security

Network authentication	IEEE 802.1X(EAP-TLS, EAP-LEAP)
Secure Communication	HTTPS
Access Control	IP-based access control
Data Protect	Encryption credentials
Audit	Access / System / Event Log management
Device ID	Device certificate(Hanwha Vision Root CA)

## General

Memory	RAM	4GB
	Flash	512MB
Edge Storage	Micro SD/SDHC/SDXC	Max. 256GB x 1slot

## Environmental & Electrical

Operating Condition	Temperature	0°C~+45°C(+32°F~+113°F)
	Humidity	0~90% RH(non-condensing)
Storage Condition	Temperature	-40°C~+65°C(-40°F~+149°F)
	Humidity	0~90% RH(non-condensing)
Input Voltage		12VDC, HPoE(IEEE802.3bt, Class5)
Power Consumption	PoE	Max 30W, typical 20W
	12VDC	Max 26W, typical 18W

## Mechanical

Color	Black
Material	Aluminum
Product Dimensions	120(W)x118.1(H)x179(D)mm
Product Weight	2,100g(4.55lb)

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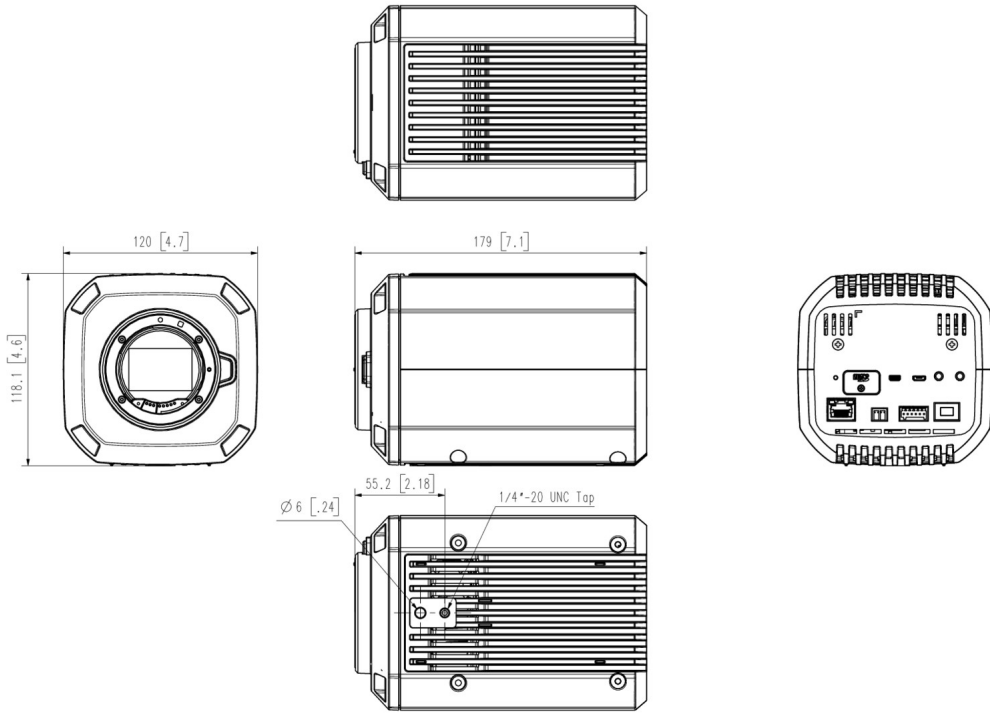


### CAD

Unit: mm [inch]

This parts should not contain any substances which are specified in AH60-0033K

NO	PART NAME	CODE NO.	MATERIAL	Q'TY	REMARK
1	ASSY-TNB-9000	070610	MATERIAL	1	REMARK



A3  
CHANGE

UNIT	mm	DESIGN	CHECK	APPROVAL	PART NAME	ASSY-TNB-9000
SCALE	1/1	M.Fujiwara	Check	Approval	MODEL NAME	TNB-9000
		19.12.18	19.12.18	19.12.18	CODE NO.	070610



070610