

# TNB-9000

8K Network 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)
- WiseStreamII support
- RJ-45, SFP slot(100/1000Mbps)
- HPoE(IEEE802.3bt, Class5), 12VDC

<b>Video</b>	
Imaging Device	43.3mm Full-frame CMOS
Effective Pixels	7680(H)x4320(V)
Min. Illumination	Color : 0.015Lux(F1.4, 1/30sec) B/W : 0.0015Lux(F1.4, 1/30sec)
Video Out	HDMI: 1080p@30fps
<b>Lens</b>	
Angular Field of View	Canon 24mm f1.4L, Auto-Iris (EF 24mm f/1.4L II USM) : Horizontal field of view: 8K 62.1° Canon 35mm f1.4L, Auto-Iris (EF 35mm f/1.4L II USM) : Horizontal field of view: 8K 44.5° Canon 50mm f1.4, Auto-Iris (EF 50mm f/1.4 USM) : Horizontal field of view: 8K 31.6° Canon 85mm f1.2L, Auto-Iris (EF 85mm f/1.2L II USM) : Horizontal field of view: 8K 19.2° Canon 100mm f2.0, Auto-Iris (EF 100mm f/2 USM) : Horizontal field of view: 8K 16.1° Canon 70-200mm f2.8L, Auto-Iris, Vari Focal (EF 70-200mm f/2.8L USM) : Horizontal field of view: 8K 23.2° ~ 8.3°
Focus Control	Autofocus
Lens Type	Canon EF mount Lens
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)
<b>Operational</b>	
Camera Title	Displayed up to 75 characters
Day & Night	Auto(ICR)
Backlight Compensation	BLC, DWDR
Digital Noise Reduction	SSNR V
Motion Detection	8ea, 8point polygonal zones (in 8K resolution only)
Privacy Masking	6ea, Rectangular - Color: Grey/Black/White
Gain Control	Low / Middle / High
White Balance	ATW / AWC / Manual / Indoor / Outdoor
Electronic Shutter Speed	Minimum / Maximum / Anti flicker (1/5 ~ 1/12,000sec)
Analytics	- Classified object type : Person/Face/Vehicle/License plate with attributes, BestShot per object - Analytics events based on AI engine : object detection, Directional detection, Enter/Exit, Loitering, Virtual line - Analytics events : Defocus detection, Motion detection, Appear/Disappear, Tampering, Audio detection, Sound classification
Serial Interface	RS-485(Samsung-T, Pelco-D/P)
Alarm I/O	Input 1ea / Output 1ea
Alarm Triggers	Analytics, Network disconnect, Alarm input

Alarm Events	File upload via FTP and e-mail Notification via e-mail SD/SDHC/SDXC or NAS recording at event triggers Alarm output Handover
Audio In	Selectable(mic in/line in) Supply voltage: 2.5VDC(4mA), Input impedance: 2K Ohm
Audio Out	Line out, Max.output level: 1Vrms
<b>Network</b>	
Ethernet	RJ-45(10/100/1000 BASE-T), SFP slot(100/1000Mbps)
Video Compression	H.265/H.264: Main/High, MJPEG
Resolution	7680x4320, 7360x4128, 6016x3384, 6016x4008, 5472x3648, 4768x3184, 4608x2592, 3840x2160, 1920x1080, 1280x1024, 1280x960, 1280x720, 1024x768, 800x600, 800x448, 720x576, 720x480, 640x480, 640x360
Max. Framerate	H.265/H.264: 8K @ Max. 15fps (Mode 0) : Available in Jan. 2020 H.265/H.264: 24MP @ Max. 20fps (Mode 1) : Available in May. 2020 H.265/H.264: 15MP @ Max. 30fps (Mode 2) : Available in May. 2020 H.265/H.264: 4K @ Max. 60fps (Mode 3) : Available in May. 2020
Smart Codec	WiseStream II
Bitrate Control	H.264/H.265: CBR or VBR MJPEG: VBR
Streaming	Unicast(10 users) / Multicast Multiple streaming(Up to 3 profiles)
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
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
Security	HTTPS(SSL) Login Authentication Digest Login Authentication IP Address Filtering User access log 802.1X Authentication(EAP-TLS, EAP-LEAP) Device Certificate(Hanwha Techwin Root CA)
Edge Storage	Micro SD/SDHC/SDXC 1slot 256GB
Application Programming Interface	ONVIF Profile S/G/T SUNAPI(HTTP API)
Web Viewer	Supported OS: Windows 8.1, 10, Mac OS X 10.10, 10.11, 10.12 Recommended Browser: Google Chrome Supported Browser: MS Explore11, MS Edge, Mozilla Firefox(Window 64bit only), Apple Safari(Mac OS X only)
Memory	4096MB RAM, 512MB Flash
<b>Environmental</b>	
Operating Temperature / Humidity	0°C ~ +45°C(32°F ~ +122°F) / Less than 90% RH
Storage Temperature / Humidity	-40°C ~ +65°C(-40°F ~ +149°F) / Less than 90% RH
Certification	EMC EN 50130-4, EN 55032 Class A, EN 61000-6-3, EN 61000-3-2, EN 61000-3-3, EN 61000-6-1, FCC Part 15 Subpart B Class A, IC ICES-003 Class A,  Safety UL 60950-1

**Electrical**

Input Voltage	HPoE(IEEE802.3bt, Class5), 12VDC
Power Consumption	PoE: Max 30W, typical 20W 12VDC: Max 26W, typical 18W

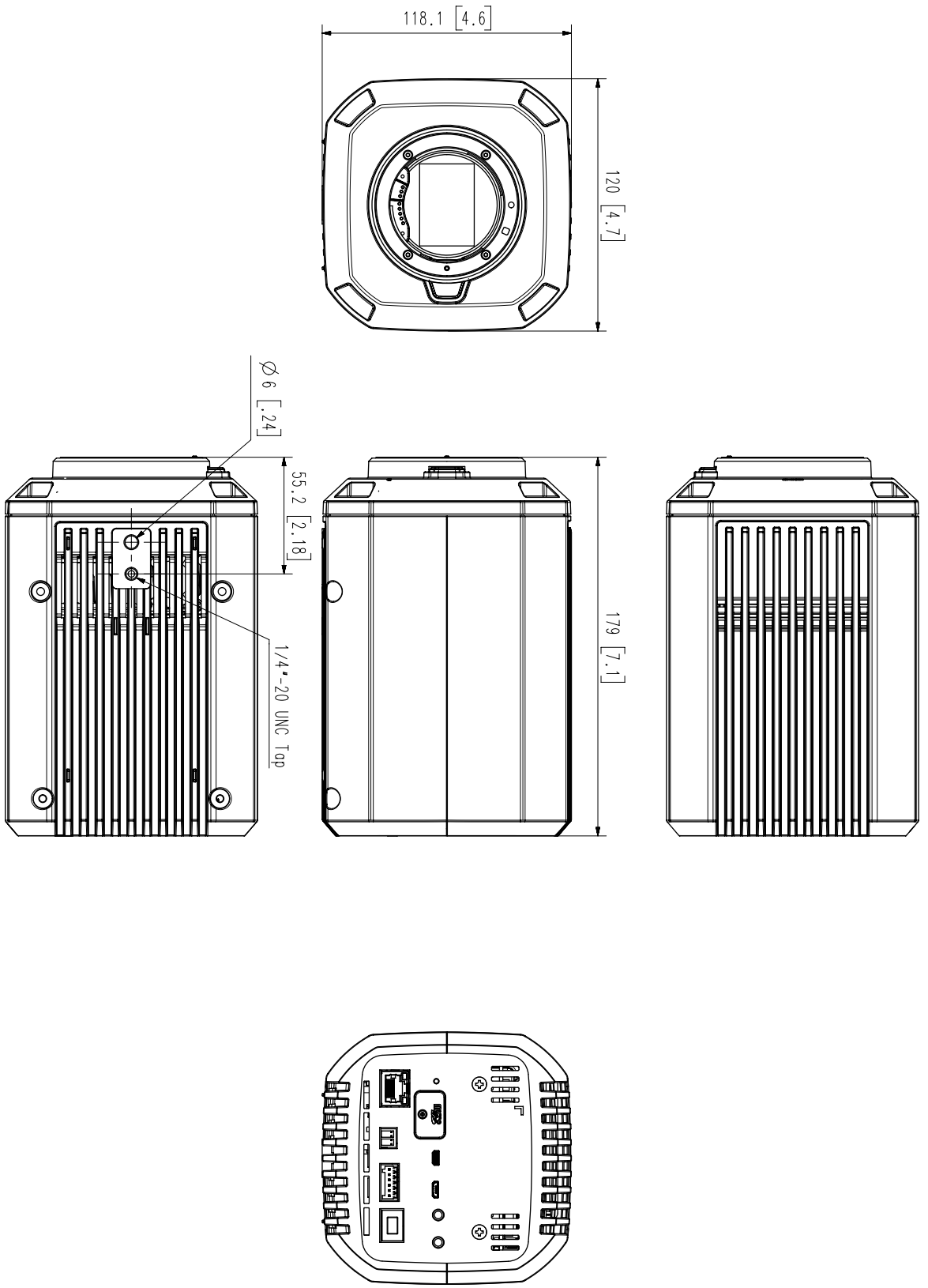
**Mechanical**

Color / Material	Black / Aluminum
Product dimensions / weight	120(W)x118.1(H)x179(D)mm, 2.1Kg(4.55 lb)
Package dimensions / weight	250(W)x250(D)x323(H)mm, 3.8Kg(8.38 lb)

- The latest product information / specification can be found at [hanwha-security.com](http://hanwha-security.com)
- Design and specifications are subject to change without notice.
- Wisenet is the proprietary brand of Hanwha Techwin, formerly known as Samsung Techwin.

This parts should not contain any substances which are specified in AH80-0033K

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



A3  
CHANGE

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