

Technical Newsletter

Jun 2025 Service Operation Team

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Latest Firmware Information (April 2025 - May 2025)

Recommended specifications for AIB-800 profile

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- AIB-800

● Purpose

- To guide you through setting up profiles for optimal performance of AI BOX events and AI analysis.

● Precautions on Setup

1) Resolution

- If the resolution of the AI analytics profile exceeds 1080P, the system may get overloaded.
- ☞ If the AIBox profile's resolution exceeds 1080p, change it to 1080p.

2) FPS

- The reference Resolution/FPS specified for the AI analytics profile is at least 1080p/10fps.

3) Profile Output

- For the camera, using one profile only guarantees the proper frame rate, but using multiple profiles simultaneously does not guarantee the transmitted video stream's frame rate.

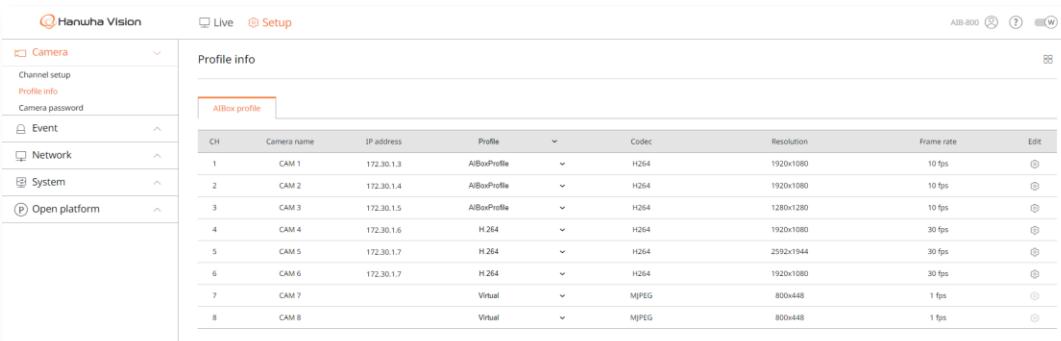
That is, using two profiles may result in a frame rate of 20fps even if 30fps is set.

- ☞ It is recommended to use a single profile for the camera.

● Recommended specifications for AIB-800 profile

- Profile Setting: [Setup] > [Camera] > [Profile Info]

Check the channel-specific information



CH	Camera name	IP address	Profile	Codec	Resolution	Frame rate	Edit
1	CAM 1	172.30.1.3	AIBoxProfile	H264	1920x1080	10 fps	✎
2	CAM 2	172.30.1.4	AIBoxProfile	H264	1920x1080	10 fps	✎
3	CAM 3	172.30.1.5	AIBoxProfile	H264	1280x720	10 fps	✎
4	CAM 4	172.30.1.6	H264	H264	1920x1080	30 fps	✎
5	CAM 5	172.30.1.7	H264	H264	2592x1944	30 fps	✎
6	CAM 6	172.30.1.7	H264	H264	1920x1080	30 fps	✎
7	CAM 7	Virtual	MJPEG	MJPEG	800x448	1 fps	✎
8	CAM 8	Virtual	MJPEG	MJPEG	800x448	1 fps	✎

✓ Recommended specifications for AIB-800 profile

- Resolution: 1920*1080 (Full HD)
- FPS: 10fps (Min) or higher
- Recommended to use a single profile for the camera

Prioritizing recorded data to be deleted in case of duplicate sections

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- All storage models of Hanwha Vision

● Prioritizing recorded data to be deleted in case of duplicate sections

Case #1	If the system time is changed to the past → Delete old recorded data in the following manner: Delete the Oldest First								
	e.g.) If the date is changed to the 3 rd during normal recording until the 4 th .								
	Date	1	2	3	4	5	6		
	Recorded Data	Duplicate Section		Duplicate Section					
Data Deletion Order		1	2		3				
Case #2	If the system is replaced and the MAC Address is changed → Delete old recorded data in the following manner: Delete the Oldest First								
	e.g.) If the product is replaced due to a 4-day failure and the existing HDD is reused								
	Date	1	2	3	4	5	6		
	Recorded Data	Duplicate Section			System Replacement				
Data Deletion Order		1		2					
Case #3	A replacement is temporarily used for recording during the repair of the existing system, and then the repaired original system is reinstalled → Delete the sections recorded by the replacement first								
	e.g.) If a replacement is used for 3-4 days for product repair								
	Date	1	2	3	4	5	6		
	Recorded Data	Duplicate Section		Sections recorded by replacement			Duplicate Section		
Data Deletion Order		2		1		3			

● Conclusion

- 1) Recording data overwrite (delete) logic is managed by two items: duplicate data and timestamp.
- 2) If the MAC address changes due to the use of a replacement, the duplicate data recorded during the replacement period is deleted first as data is grouped and managed based on the MAC address.

※ It is recommended to back up the sections recorded by the replacement separately.

Changes to the TNV-C8014RM_C8034RM GASKET TOP Shape

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- TNV-C8014RM, C8034RM
- SPB-VAN23W, SPG-VAN23W

● Reason for change

- 방수 성능 향상을 위한 GASKET 형상 변경

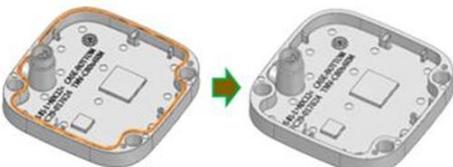
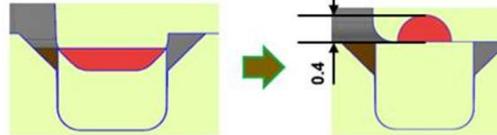
● Details

No.	Part name	Before change, LOT number	After change, LOT number
1	GASKET-TOP	HP07-001971A	HP07-001971B
2	CASE-BOTTOM	FC29-017624A	FC29-017624B

※ Summary of changes

(Old) Structure where the rib of the bottom cover presses the gasket to waterproof

(New) Waterproofing improved by adding a protrusion to the GASKET. The rib of the bottom has been removed and flattened..

Parts	Shape	Changes
CASE-BOTTOM		Cutting off 0.5mm of the RIB and flattening it (yellow part)
GASKET		Changing height and adding bumps

● Service Guide

- The case-bottom material and gasket pair need to be changed

- Effective Date: May 19, 2025

Cameras and FW versions compatible with Hanwha Vision CloudConnector

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- Hanwha Vision's P AI/X AI/Q AI/T AI series

● Purpose

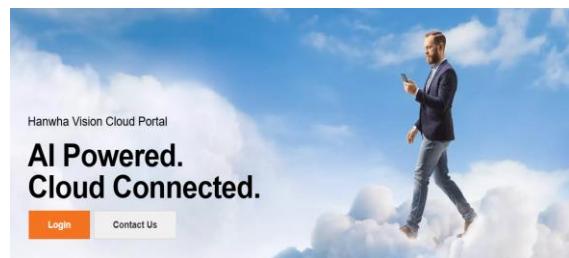
- To provide information on the camera series and firmware versions compatible with Hanwha Vision Cloud Connector APP.

● Hanwha Vision Cloud Portal

- Cloud-based solution providing scalability and convenience

- . OnCloud: Cloud-based video security system (VSaaS)
- . SightMind: Biz intelligence through video analytics
- . HealthPro: Device management . status monitoring

※ We are planning to expand our service area starting with the Americas.



Subscription licensing service

● Hanwha Vision CloudConnector



[Download](#)

Category	File Name
Firmware	QNV-C8013R_2.21.10_20250424_R216.zip
Firmware	CloudConnector_v_Q_AI_1_8_4_20250411_hva_prod.zip

- Install the CloudConnector APP on compatible P/X/Q/T series cameras to connect to the Hanwha Vision Cloud Portal. Currently, more than 100 cameras are compatible, and it is being updated constantly to expand the compatible models.
- It can also be downloaded from the FW download path of each compatible camera.

● FW versions supported by each compatible camera

Model Product Line	P AI Series	X Core Series	Q Core Series	T AI Series
FW Ver.	2.23.01 or higher	2.23.05 or higher	2.21.10 / 2.23.01 or higher	2.21.10 or higher

- Check the website for the details of product-specific FW version support.

[Direct-to-Cloud Camera Compatibility – Hanwha Vision Support Portal](#)

New features of 2nd generation X-Series AI cameras(1/3)

Info. Type

 Quality Settings Repair S/W Etc

● Target model

- 6 Types of 2nd Generation X-Series AI Camera
- XND-A8084RV, XNO-A9084RV, XNO-A8084R, XNO-A9084R, XNV-A8084R, XNV-A9084R

● New SoC (Wisenet 9)-applied model

- Info on SoC: <https://www.hanwhavision.com/ko/news-center/1611741/>



● New features

- WisePower: Camera power consumption monitoring
- Privacy Masking with 8 Point support: 4Point(old) → 8Point(new) to display a 8point polygonal zone.
- DPM (Dynamic Privacy Mask): object recognition and masking based on WiseAI
- Adding OPUS audio codec, MACsec security protocol, WiseStream, User permissions, some profile Event Rules, including many improvements and changes

● New features (1) : WisePower

- Provides users with various power-related information (request, allocation, maximum, average, current power consumption, PoE class, etc.)
- Reduces power consumption by reducing the IR's visible distance when ECO Mode is set.
- WisePower Setting: [Setup] → [System] → [WisePower]

WisePower

Period 1 day 1 week 1 month

Power monitoring

PoE class(PSE)	3
Power requested	12.95W
Power allocated	-
Current power	6.5W
Max. power	8.72W
Avg. power	6.01W

Eco mode Enable
Enabling [Eco Mode] reduces the IR visibility by 50%.

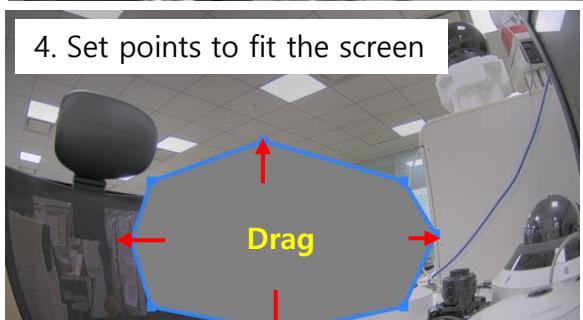
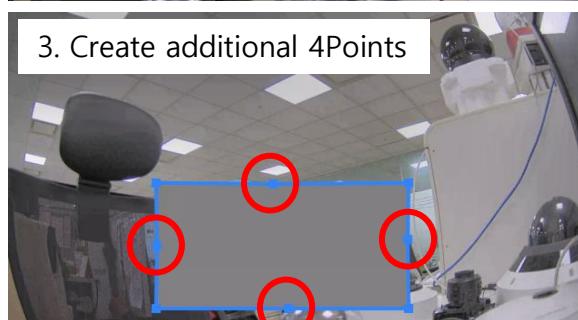
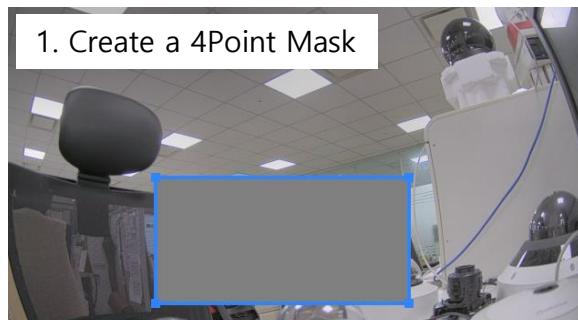
New features of 2nd generation X-Series AI cameras (2/3)

Info. Type

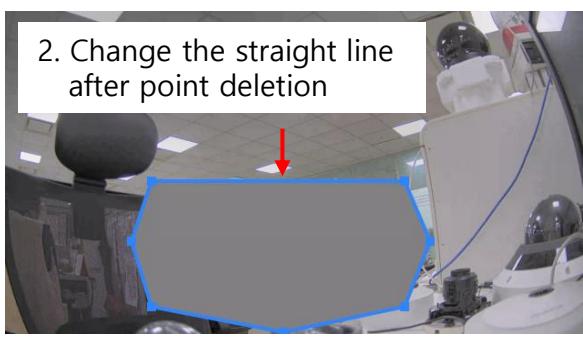
 Quality Settings Repair S/W Etc

● New features (2) : Privacy masking with 8 Point support

- Privacy Masking function expanded by changing from 4-point support to 8-point support.
- After setting the initial 4-point areas, you can add up to 4 points more.
- Privacy Mask Setting : [Setup] → [Video & Audio] → [Video Settings] → Check the [Enable Privacy Area] option
- Point Addition: Set 4 Points → Name the Mask → Click the **+** mark created when the mouse overlaps in the middle of the line → Add 1 Point → Set the points to fit the screen
- Point Deletion: 8 Points available → Click the **-** mark created when the mouse overlaps on the Point → Confirm Point deletion
- Example of adding points



- Example of deleting a point



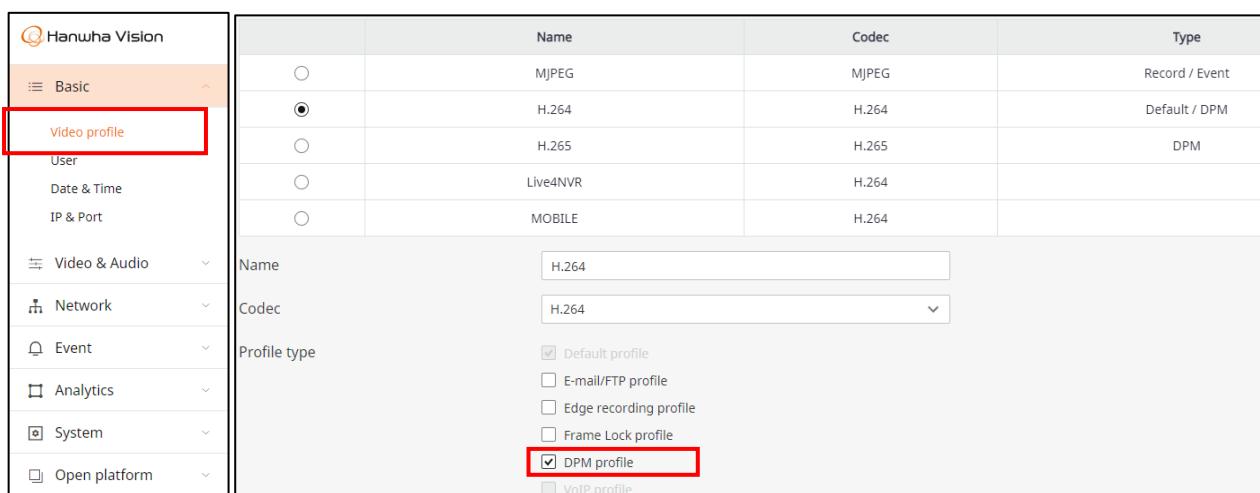
New features of 2nd generation X-Series AI cameras (3/3)

Info. Type

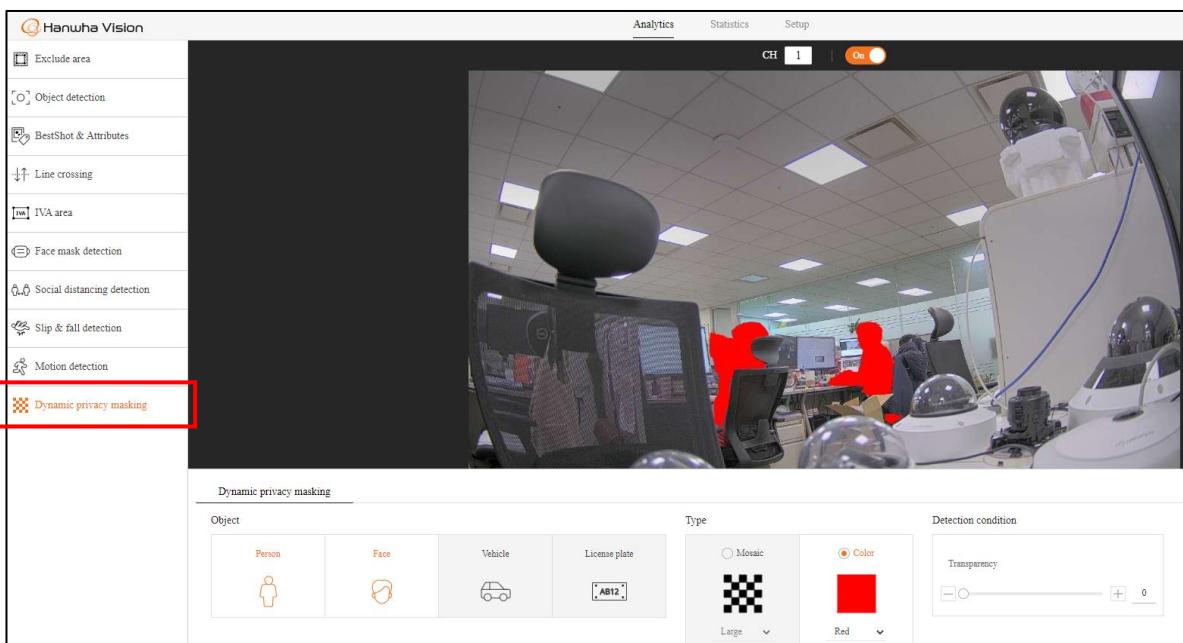
 Quality Settings Repair S/W Etc

● New features (3): DPM (Dynamic Privacy Mask)

- DPM function added to WiseAI App
- Supports objects targeting people, faces, vehicles, and license plates, and provides two types: Color and Mosaic.
- Enabled by checking the [DPM profile] option in the video profile settings, and the DPM setting profile does not support OSD.
- DPM Setting
 - . 1st : [Setup] → [Basic] → [Video Profile] → [Profile type] → Check the [DPM Profile] option
 - . 2nd : [Open platform] → [WiseAI App] → [Analytics] → [Dynamic Privacy Masking]



The screenshot shows the 'Video profile' configuration screen. On the left, there is a sidebar with various settings like 'Basic', 'User', 'Date & Time', 'IP & Port', 'Video & Audio', 'Network', 'Event', 'Analytics', 'System', and 'Open platform'. The 'Video profile' section is highlighted with a red box. On the right, there is a table for video profiles and a configuration panel for a selected profile. The table has columns for 'Name', 'Codec', and 'Type'. The configuration panel includes fields for 'Name' (H.264), 'Codec' (H.264), and 'Profile type'. Under 'Profile type', there are checkboxes for 'Default profile', 'E-mail/FTP profile', 'Edge recording profile', 'Frame Lock profile', and 'DPM profile'. The 'DPM profile' checkbox is checked and highlighted with a red box.



The screenshot shows the 'Dynamic privacy masking' configuration screen. On the left, there is a sidebar with various detection options like 'Exclude area', 'Object detection', 'BestShot & Attributes', 'Line crossing', 'IVA area', 'Face mask detection', 'Social distancing detection', 'Slip & fall detection', 'Motion detection', and 'Dynamic privacy masking'. The 'Dynamic privacy masking' option is highlighted with a red box. On the right, there is a preview window showing a camera feed with several red redaction boxes. Below the preview, there is a configuration panel for 'Dynamic privacy masking'. It includes sections for 'Object' (Person, Face, Vehicle, License plate), 'Type' (Mosaic, Color), and 'Detection condition' (Transparency slider). The 'Color' type is selected.

New update firmware (April, 2025 – May, 2025)

구분	MODEL NAME	FIRMWARE	VER	DATE	REMARK
NVR	ARN-410S ARN-810S ARN-1610S	ARN-1610S_5.35.22_250429 145241	5.35.22	2025-05-08	- Delete fan deletion related logs and events
	QRN-830S XRN-425S XRN-815S	QRN-1630S_5.35.22_250429 145655			
	XRN-420S	XRN-420S_5.35.22_2504291 45529			
NW CAM	PNB-A9001LP	PNB-A9001LP_2.23.01_2025 0327_R31	2.23.01	2025-04-04	<ul style="list-style-type: none"> - Ambarella Chip SDK version updated from v2 to v3 ※ Wisenet Road AI version update required - SD card related CGI not supported to prevent function conflict ※ Function conflict occurs if SD card is used for purposes other than Wisenet Road AI function
	PNO-A9081RLP PNV-A9081RLP	PNO-A9081RLP_2.23.01_202 50327_R31			
	PNB-A6001	PNB-A6001_2.23.01_202504 14_R105			
	PND-A6081RF,RV PNO-A6081R PNV-A6081R	PNO-A6081R_2.23.01_20250 414_R101			
	PND-A9081RF,RV PNO-A9081R PNV-A9081R	PNO-A9081R_2.23.01_20250 414_R106			
	QNO-C6083R	QNV-C6083R_2.22.02_20250 414_R228			
	QND-C8013R QNO-C8013R	QNV-C8013R_2.21.10_20250 414_R214			
	QND-C8023R QNO-C8023R	QNV-C8023R_2.21.10_20250 414_R158			
	QNO-C8083R	QNV-C8083R_2.22.02_20250 414_R440			
	QNO-C9083R	QNV-C9083R_2.22.02_20250 414_R521			
	TNV-C7013RC	TNV-C7013RC_2.23.05_2025 0414_R12	2.23.05	2025-04-19	<ul style="list-style-type: none"> - Support for [Edge Recording] function of Cloud Connector app ※ When [Edge Recording] function is activated, recording and playback functions of the camera are not supported. Recording and playback menu of camera web viewer disappears.
	XNB-6002	XNB-6002_2.23.05_2025041 4_R328			
	XNB-8003, 9003 XND-8083RV XND-8093RV XND-9083RV XNO/V-8083R XNO/V-9083R XNV-8093R	XND-9083RV_2.23.05_20250 414_R13			
	XND-C6083RV XND-C7083RV XNO/V-C6083R XNO/V-C7083R XNV-C6083	XND-C7083RV_2.23.05_2025 0414_R12			
	XND-C8083RV XND-C9083RV XNO/V-C8083R XNO/V-C9083R	XND-C9083RV_2.23.05_2025 0414_R12			
	XNP-C6403(R,RW) XNP-C8253(R) XNP-C8303RW XNP-C9253(R) XNP-C9303RW	XNP-C9303RW_2.23.05_202 50414_R299			

New update firmware (April, 2025 – May, 2025)

구분	MODEL NAME	FIRMWARE	VER	DATE	REMARK	
NW CAM	XNP-C7310R	XNP-C9310R_2.23.05_2025 0414_R435	2.23.05	2025-04-19	<p>- Support for [Edge Recording] function of Cloud Connector app</p> <p>※ When [Edge Recording] function is activated, recording and playback functions of the camera are not supported. Recording and playback menu of camera web viewer disappears.</p>	
	XNP-C9310R	XNP-C9310R_2.23.05_2025 0414_R435	2.23.05			
	XNV-6083RZ	XNV-6083RZ_2.23.05_2025 0414_R180	2.23.05			
	XNV-6083Z	XNV-6083Z_2.23.05_2025 0414_R180	2.23.05			
	XNO-6123R	XNO-6123R_2.23.05_2025 0414_R44	2.23.05			
	XNV-6123R	XNV-6123R_2.23.05_2025 0414_R44	2.23.05			
	XNB-8002					
	XNB-9002					
	XND-8082RF					
	XND-8082RV					
	XND-9082RF	XND-9082RF_2.23.05_2025 0414_R12	2.23.05			
	XND-9082RV	XND-9082RV_2.23.05_2025 0414_R12	2.23.05			
	XNO-8082R					
	XNO-9082R					
	XNV-8082R					
	XNV-9082R					
	XNV-8083RZ	XNV-8083RZ_2.23.05_2025 0414_R46	2.23.05			
	XNV-8083Z	XNV-8083Z_2.23.05_2025 0414_R46	2.23.05			
	XNV-9083RZ	XNV-9083RZ_2.23.05_2025 0414_R46	2.23.05			
	XNF-9010RS	XNF-9010RS_2.23.05_2025 0414_R12	2.23.05	2025-04-26		
	XNF-9010RV	XNF-9010RV_2.23.05_2025 0414_R12	2.23.05	2025-04-26		
	XNF-9010RVM	XNF-9010RVM_2.23.05_2025 0414_R12	2.23.05	2025-04-26		
	PNB-A9001	PNB-A9001_2.23.01_20250 414_R105	2.23.01	2025-04-30		
	XNB-6003	XNB-6003_2.23.05_20250 0422_R11	2.23.05	2025-05-08		
	QNE-C8013RL	QNE-C8013RL_2.22.02_20250 424_R259	2.22.02	2025-05-09		
	QNE-C9013RL	QNE-C9013RL_2.22.02_20250 424_R257	2.22.02			
	QNF-C9010	QNF-C9010_2.21.10_20250 424_R277	2.21.10			
	QNV-C6083R	QNV-C6083R_2.22.02_20250 424_R232	2.22.02			
	QNV-C8011R	QNV-C8011R_2.22.02_20250 424_R295	2.22.02			
	QNV-C8012	QNV-C8012_2.22.02_20250 424_R249	2.22.02			
	QNV-C8013R	QNV-C8013R_2.21.10_20250 424_R216	2.21.10			
	QNV-C8023R	QNV-C8023R_2.21.10_20250 424_R160	2.21.10			
	QNV-C8083R	QNV-C8083R_2.22.02_20250 424_R444	2.22.02			
	QNV-C9011R	QNV-C9011R_2.22.02_20250 424_R312	2.22.02			
	QNV-C9011R	QNV-C9011R_2.22.02_20250 424_R312	2.22.02			
	QNV-C9083R	QNV-C9083R_2.22.02_20250 424_R524	2.22.02			
	TNV-C8011RW	TNV-C8011RW_2.22.02_20250 424_R240	2.22.02			
	TNV-C8014RM	TNV-C8014RM_2.21.10_20250 424_R140	2.21.10			
	TNV-C8034RM	TNV-C8034RM_2.21.10_20250 424_R97	2.21.10			

New update firmware (April, 2025 – May, 2025)

구분	MODEL NAME	FIRMWARE	VER	DATE	REMARK
NW CAM	TNO-C3010TRA	TNO-C3010TRA_2.21.03_20250422_R321	2.21.03	2025-04-25	- Fixed screen breakage and monochrome image exposure issues when changing gain table
	TNO-C3012TRA	TNO-C3012TRA_2.21.03_20250422_R336			
	XNB-6000	XNB-6000_2.10.07_20250423_R11	2.10.07	2025-05-01	- Changed to the FE binary where Panasonic motor driver IC was replaced with VM117 due to the discontinuation of the driver IC ※ Impossible to earlier firmware
	XND-A8084RV XND-A9084RV XNO-A8084R XNO-A9084R XNV-A8084R XNV-A9084R	XNO-A9084R_25.01.02_20250504_R420	25.01.02	2025-05-09	- Improved bit saving performance of codec in WDR mode in low light environment - Open source version update and patch
	PNM-C9022RV	PNM-C9022RV_2.23.01_20250509_R71	2.23.01	2025-05-15	- Fix LLDP&CDP infinite reboot issue
	XNF-9013RV	XNF-9013RV_2.23.06_20250509_R19	2.23.06		
	PNO-A9311R	PNO-A9311R_2.23.02_20250508_R248	2.23.02	2025-05-17	Changes to fix production issues 1. Micom firmware upgrade 2. Audio output issue fix
Intercom	TID-600R	TID-600R_2.12.02_20250502_R2	2.12.02	2025-05-13	- Added the feature to send video via SRTP when making SIP calls - Applied [AAC] as a default value for audio codec