July 2023

# Firmware Update for V2020-WIR-360 and V2032-WIR-360 Multi-Sensor Cameras, Introducing AI-Based Analytics

# **General Description**

Vicon has released firmware for production for the cameras listed below.

For Valerus users who want to take advantage of the new AI features, download the latest full PRONTO Discovery Tool 2.19 with all the latest firmware for easy batch upgrade of all cameras. For users with a low bandwidth connection who already have PRONTO version 2.18, and only want the updated multi-sensor firmware, simply download the new firmware and add it to the firmware library; see that procedure in the installation section of this document.

A firmware upgrade is <u>not recommended for ViconNet customers</u>, since the advanced AI features are not supported.

Camera	Product Code	Older Firmware	Newest Firmware
V2020-WIR-360 V2032-WIR-360	10517-20 10517-25	fw_camC6P_01.00.0059	fw_camC6P_01.00.0074

# **Vicon Production**

The latest firmware and discovery tool are available on Vicon's website. A link is provided in the installation section of this document. Manufacturing will start using the new firmware for new camera production.

Updating is recommended for those who want to take advantage of analytics in Valerus or who are impacted by the bugs fixed, as noted below.

**NOTE:** After the camera is upgraded, the user must perform a Reset to Default to enable Advanced Museum Search and AI event functionality in Valerus. After the camera re-boots, Valerus will re-sync all previously programmed settings. <u>Any settings that were set via the camera web interface (for example, analytics, optical zoom settings and sensor positions/presets) will need to be re-programmed. Failure to "Reset to Default" will result in undefined configurations between Valerus and the camera.</u>



**NOTE:** ViconNet customers need to use the "ViconNet" mode in the camera's setting to continue to use Museum Search. AI Analytics is not available in the ViconNet VMS. Additional information can be found on Vicon's website.

For other applications, please review these release notes to help determine if the fixes included are relevant to your environment.

Please review the upgrade instructions described at the end of this document.

## **New Features**

#### **Object classification**

The camera's AI-based object classification allows it to distinguish people, vehicles, and animals from other objects in a scene and in analytics rules and triggers. Object-only recording, and the ability to filter out environmental noise that can inadvertently trigger a motion detection alarm (e.g., shadows, swaying trees, bushes, etc.), significantly increase operational efficiencies. In addition, Valerus 23.2+ includes color-coded bounding boxes and an advanced Museum Search that allows fast searching of recorded data with AI object classification filters.

#### **Motion detection**

Motion is now enabled by default for the entire scene for rapid deployment.

### **Known Issues**

#### Tailgating

The camera's new analytics functionality has the capability to send "Tailgating" alarms. At this time, Vicon's Valerus VMS cannot receive and act upon these alarms.

#### **Object Left and Object Removed**

The camera's "Object Removed" and "Object Left" analytics have inconsistent performance.

#### Valerus multiple bounding boxes

When a vehicle is moving in front of several parked vehicles, there may be several bounding boxes around the stationary objects for a short time.

## **Fixed Issues**

#### HSTS missing from HTTPS server

Some scanners will pick up a "HSTS Missing From HTTPS Server (RFC 6797)" vulnerability.

#### Losing image from sensor 4

A rare problem where the stream from sensor 4 would stop working until the camera was rebooted.

#### **ONVIF response**

Under certain circumstances, it was possible for the camera to stop responding to ONVIF while it was still delivering video streams.

#### **Multicast ports**

Changing the audio port in multicast for a specific audio channel would affect the incorrect audio stream.

#### Manual selection of PoE type

Removed the option to manually select a PoE (Power over Ethernet) type of 802.3af, as the camera needs at least type 802.3at.

## Installing the Updated Firmware

The latest firmware is available on Vicon's website from the Software Downloads page. A link is provided below. <u>http://www.vicon-security.com/software-downloads-library/vicon-camera-software/</u>

Download the firmware to your PC. Unzip the file.

There are two options to install the new firmware in the camera:

- Using web interface of the camera, uploading the firmware directly into the device.
- With PRONTO Device Manager Software that can be installed on a PC.

## **Camera Web Interface**

In the camera web interface, under Setup > System > Maintenance, press "Choose a File" under "Firmware Upgrade" and select the downloaded firmware file. Then press "Upload" to start the update. The camera will install the update and reboot with the new firmware version:

¥ VI	CON	H	) Multi-Sensoi	Camera			
	🍬 👬 🛎 🖄 🔗	n == 8 R n == *			р. II 🚬 🕖	20	23/06/26 15:39:03
Live View							
A/V Streams	System Information		~	Backup		· · · · · · · · · · · · · · · · · · ·	~
Image	Firmware Version :	camC6P_01.00.0071		Download a fi	ull backup file of camera settings		
Network	MCU Version :	1007				Download Now	
System	Model Name :	V2020-WIR-360P					
- Date/Time	Serial Number :	TSCB41003510					
- Maintenance	Mac Address :	00:06:68:20:fe:86					
- User Management							
Event							
Video Analytics	Firmware Update		~	Restore		•	~
	Choose a bin file to upgr File Name: fw_came	ade camera. 6P_01.00.0071.bin	Upload	Choose a back	kup file to restore camera settings Choose a file	Upload and Restore	
		Rehoot Camera.		NOTE: Restori	ng will cause the camera to restart.		
	During reboot camera	connection will be lost.					

## Using PRONTO Device Manager Software

PRONTO is Vicon's device manager tool that can be used to discover all Vicon cameras in a network. This standalone single discovery tool running on a PC, allows users to discover cameras in the network, configure network parameters and update camera firmware (single camera, or in batch)

Pronto Device manager can be downloaded from Vicon's website: <u>https://www.vicon-security.com/software-downloads-library/pronto-device-manager-software/</u>

#### Pronto Device manager user guide can be found here:

https://www.vicon-security.com/wp-content/uploads/2022/08/Vicon-Pronto-Device-Manager\_User-Guide.pdf

* VICON - 2.10	PRONTO Device Manager _						$\Box \times$
<b>VICON</b> Change Credentials							
Show V All V IP Device V ONVIF Device	Model Number	Name	MAC Address	IP Address	Firmware Version	Status	
	V2002D-PTZ	VICON-V2002D-PTZ-T02	00:04:7d:27:b7:bc	192.168.2.38	01.02.1.13.5766		
	V2005D-W28IR	VICON-V2005D-W28IR-S	54:6d:52:00:65:23	192.168.2.45	01.00.1.8.5825		
Apply	V2008-W-NL	VICON-V2008-W-NL-S02	54:6d:52:00:65:2e	192.168.2.39	01.00.1.12.5158		
Search	V2020-WIR-360P	VICON_V2020-WIR-360P		192.168.2.36		Not Authorized	
-V Name (9) O Refresh	V2102B-W28IR	VICON-V2102B-W28IR-S	54:6d:52:00:65:71	192.168.2.37	01.00.0.11.5001		
	V2360W-12	VICON-V2360W-12-S021		192.168.2.44		Not Authorized	
	V2360W-12-1	VICON-V2360W-12-1-S1	00:06:68:72:5d:b0	192.168.2.34	01.00.0.10.5768		
	V8360W-12	V8360W-120007D82FB5		192.168.2.35		Not Authorized	
v2020-Wik-360F (1)	V-CELL-HD-B	V-CELL-HD-B0007D81A1		192.168.2.53		Not Authorized	
E-☑ v2360w-12 (t) 	ດີ Device Properties		H Network Settings		Firmware		
면 ⊻ v8360₩-12 (1) 면-√ v-CELL-HD-B (1)							

To update firmware on one or more cameras:

- Scan the network and find the camera model that needs a firmware update.
- Enter valid credentials for the camera that needs a firmware update.
- Select camera(s). (More cameras can be selected that use the same firmware file.)
- Press the "Upload Firmware File" button; load the new firmware into Pronto.
- Press "Upgrade Device" and select the new firmware file just loaded into Pronto.
- Press Apply. The new firmware is now uploaded to the selected camera(s).
- Allow some time for the camera(s) to reboot after the firmware is uploaded.
- Press "Refresh" and verify the camera(s) are now listed with the new firmware version.

## **Procedure for Adding New Firmware to the Firmware Library:**

- 1. Download the file from the website, unzip it, and save it on your device.
- 2. In PRONTO, select the multi-sensor from the devices on the left.
- 3. Navigate to the Firmware tab.
- 4. Click "Upload Firmware File".

% VICON - 2.17	PRONTO Device Manager					ž
VICON Change Credentials						hats
Show	IP Address: 192.168.1.228					
V All V IP Device V ONVIF Device	∯∯ Device Properties	H Network Settings	Firmware	3		
	Firmware Version: camC6P_01.00.0071					
	Firmware Update:					
	Upgrade Version: Upload Firmware File Upgr					
- Name (13) S Refresh	4					
IPC-HDBW4239R-ASE (1)						
V1020-WIR-360 (1)						
V2005D-W28IR (1)						
V2008D-W310MIR (1)						
V2008-WNL-LPR (1)						
- VS050-WIR-360P (1)						
_ 🖓 🗊 192.168.1.228 🛛 🧕 🤶						
V2360W-12-1 (t)						
■ □ V9888-W311MIR (I)						
V-CELL-HD-B (1)						

5. Select the firmware to add and click Open; once uploaded, it is available in the library to update the relevant cameras.