

H5A Camera Line Firmware Release Notes

Version 4.66.0.26 – Released September 14, 2023

New Features

- “No Smart Analytics” mode has been renamed to “No Video Analytics”
- Support added for 1/10,000s & 1/30,000s exposure levels

Issues Fixed

- Resolves internal manufacturing issues
- Resolves an issue that can potentially cause incorrect URL redirections
- Resolves an issue that can potentially cause the RTSP stream to result in an error when the edge rotation value is changed while the camera is tiling
- Resolves an issue that potentially prevents analytics events from displaying properly on ACC when the image stream is rotated from the WebUI

Please note that firmware version 4.66.0.26 deprecates support for legacy analytic metadata information. As a result, bounding boxes will not be visible on CCT and ACC6 or earlier versions. Please monitor CCT release notes for future compatibility information; alternatively CCT 2.4.0 (or newer versions) supports metadata information display if "ONVIF Analytics Metadata" is enabled. In order to maintain compatibility with ACC6 or earlier versions please use firmware version 4.60.0.32 or earlier.

Version 4.60.0.32 – Released July 12, 2023

Issues Fixed

- Resolves an issue that can potentially cause the red LED light to not blink when expected to (Corner camera only)

Version 4.60.0.24 – Released May 30, 2023

New Features

- Image rotation is now supported through the WebUI, refer to the user guide for detailed instructions on implementing this feature
- A new option titled “No Smart Analytics” is available through the WebUI that allows the disabling of Smart Analytics functions (basic pixel motion detection will not be disabled)
- ONVIF Profile M is now supported

Issues Fixed

- Resolves internal manufacturing issues
- Resolves issues that may be caused by using the new image rotation feature through WebUI in conjunction with image rotation through ACC
- Resolves an issue that could potentially cause issues when loading the WebUI on Mac-based Safari and Google Chrome browsers

Version 4.38.0.32 – Released January 9, 2023

Issues Fixed

- Fixes a firmware certification issue that could potentially cause ACC 7.14.10+ to reject the camera's firmware if downloaded from the Avigilon website

Version 4.38.0.28 fixes an issue present in versions 4.38.0.26 and 4.38.0.24. Customers with the affected firmware versions are recommended to upgrade the firmware as soon as possible.

Version 4.38.0.28 – Released November 4, 2022

Issues Fixed

- Fixes an issue present in 4.38.0.26 & 4.38.0.24 where a temporary network disruption to ACC or the NTP service may result in cameras not streaming to ACC, even when the network connection is restored

Version 4.38.0.26 – Released November 1, 2022 (not recommended for use)

Issues Fixed

- Fixes an issue that can cause the camera not to adjust to Daylight Savings Time correctly when set to the IST/IDT time zone

Version 4.38.0.24 – Released October 7, 2022 (not recommended for use)

Issues Fixed

- Fixes an issue that could potentially cause the camera to fail to connect to ACC if the Network Time Protocol is unreachable

Version 4.38.0.18 – Released July 29, 2022

Issues Fixed

- Fixed an internal manufacturing issue.

Version 4.38.0.16 – Released June 27, 2022

New Features

- User password hashing and encryption algorithms have been updated.
- Successful logins are now shown in the camera access logs.
- Added the ability to logout from the camera's web interface on demand or after timeout.
- Added support for removable privacy zones.
- Added support for DSCP.
- Added the ability to download a bug report from the camera's web interface.
- CRYPT information is now displayed in the 'Security' tab, under 'Network'.
- Improved video analytics long-range detection at night.
- Added the ability to reset the camera to factory default settings using the Web-UI, while keeping the network settings. A new checkbox named 'Soft Reset' can now be found under 'System'.
- Added the 'Analytics Scene Mode' option to the indoor version of dome cameras.

Issues Fixed

- Addresses an important security issue.
- Fixes an issue that could cause the information displayed in the login page to be misaligned.
- Fixes an issue that could cause an H.265 stream with smart codec enabled to generate a higher bandwidth compared to the same stream with smart codec disabled.
- Fixes an issue that could cause device logs not to be cleaned after a factory reset.

- Fixes an issue where under certain circumstances the camera would not generate a tiled stream.
- The live stream resolution in the camera's web UI has been improved.
- Resolves known issue in previous 4.20.0.xx versions where logging out of the WebUI causes the camera to fail

Version 4.20.0.24 – Released Mar 15, 2022

New Features

- Improved image tampering algorithm

Known Issues

- Logout on WebUI causes camera failure

Version 4.20.0.20 – Released Feb 17, 2022

Issues Fixed

- Fixed an internal manufacturing issue

Known Issues

- Logout on WebUI causes camera failure

Version 4.20.0.12 – Released Dec 22, 2021

Issues Fixed

- Fixed an internal manufacturing issue

Known Issues

- Logout on WebUI causes camera failure

Version 4.18.0.98 – Released Nov 5, 2021

Issues Fixed

- Fixed an internal manufacturing issue

Version 4.18.0.92 – Released Oct 25, 2021

Issues Fixed

- Fixed an internal manufacturing issue

Version 4.18.0.44 – Released Aug 5, 2021

New Features

- Added the ability to disable the camera's WebUI and all non-ONVIF APIs
 - This can be done by clicking the *Disable non-ONVIF APIs* checkbox which is found in the *Disable WebUI* tab of the camera's WebUI
 - Once this change is applied the camera will return HTTP 403 for all endpoints **not** starting in /onvif/
 - This change can only be undone with a physical revert

Version 4.12.0.62 – Released July 12, 2021

Issues Fixed

- Addresses an important security issue. Avigilon customers are advised to take this upgrade
- Fixes an issue where the camera would be unable to establish a connection when a Video Management System would try to initiate video streaming over TCP, via the ONVIF interface

Version 4.12.0.56 – Released May 12, 2021

Issues Fixed

- Fixed an issue where the bitrates of the camera's video streams could sometimes exceed the value that was configured via the Max Bitrate setting
- Fixed an issue where the image could become excessively noisy in the low-light regions of HDR scenes
- Fixed an issue which caused false-positive, *Objects Crossing Beam* events to sometimes be triggered under certain conditions

Version 4.12.0.52 – Released Mar 18, 2021

Issues Fixed

- Fixed an internal manufacturing issue

Version 4.12.0.40 – Released Feb 5, 2021

Issues Fixed

- Fixed an issue where setting the Maximum Transmission Unit (MTU) value in the camera's WebUI would have no effect.

Version 4.12.0.32 – Released Dec 21, 2020

New Features

- Added support for IP address access filtering on the camera. Users can now configure an IP access grant/block list from the camera's WebUI
- Added support for ONVIF Core Specification, Section 4.7, which enables a camera's GeoLocation information to be stored on the camera. GeoLocation attributes can be set and retrieved from the camera using standard ONVIF specified operations
- Added support for FIPS L3 CryptR Card
 - If using FIPS 140-2 encryption, it is recommended to use Avigilon Control Center version 7.12.2 or later

Version 4.10.0.24 – Released Oct 23, 2020

New Features

- Added support for the H5A Corner Camera line. **Note: This firmware version or later must be used for any H5A Corner Camera**

Issues Fixed

- Addresses a stability issue that was seen on some cameras when running firmware version 4.6.0.12 and later

Version 4.8.0.12 – Released Aug 31, 2020

New Features

- Added support for FIPS 140-2 Level 1 certified encryption of data and/or video in flight
 - This feature can be enabled on the camera using Avigilon Control Center version 7.10.2 or later
 - In order to enable this feature, the purchase of one FIPS license per camera is required. The FIPS license part number is: **CAM-FIPS**
 - If using FIPS 140-2 encryption, it is recommended to use Avigilon Control Center version 7.12.2 or later

- Added a feature which enables the minimum allowed TLS (Transport Layer Security) version to be configured via the Network page in the camera's Webui. The minimum allowed version can be set to version 1.1 or 1.2, with the default being version 1.2. Support for version 1.3 also added.

Issues Fixed

- Fixed an issue where cameras were reporting "pipeline restart" in the camera logs, which may also be accompanied by a short recording gap

Version 4.6.0.16 – Released July 27, 2020

Issues Fixed

- Fixes a critical issue where the camera's identifying information (such as Part Number, Serial Number, MAC address) can become corrupted leading to a permanent loss of communication between the camera and ACC. Once this information becomes corrupted the only way to re-establish the camera connection to ACC is with a manual intervention via the camera's Webui.
 - As this is an issue that may present itself more frequently over time, it is strongly recommended that all H5A cameras be upgraded to this version or later
- Fixes an issue which improves the accuracy of social distancing analytic feature
 - Please immediately take note that the **H5A 2MP Box Camera (2.0-H5A-B1) camera does not support the Social Distancing analytic**

Version 4.6.0.12 – Released July 22, 2020

New Features

- Adds support for the social distancing video analytic feature.
 - Avigilon Control Center users require version 7.8 or later to support the social distancing video analytic feature.
 - Please immediately take note that the **H5A 2MP Box Camera (2.0-H5A-B1) camera does not support the Social Distancing analytic**

Issues Fixed

- Image tuning update to which improves overall performance. Improvements include lower bandwidth in HDR scenes, reduced motion blur and ghosting, and better noise reduction.

Version 4.4.0.48 – Released July 3, 2020

Issues Fixed

- Fixes an internal manufacturing test issue

Version 4.4.0.40 – Released June 4, 2020

New Features

- Added support for edge storage and retrieval via Profile G conformance. Supported Profile G compliant VMSeS can retrieve video recordings from the camera's SD card. Cameras that are upgraded to this firmware version will need to enable Profile G functionality from the camera's WebUI. Enable Profile G option can be found in Setup > Storage tab. Refer to the web interface user guide to configure edge storage settings. Note: Once enabled, the "Enable Profile G" button will disappear.
 - Avigilon Control Center users require version 7.6 or later to support video retrieval functionality from the camera's SD card.

- Video playback is only supported for recordings in H.264 format. MJPEG videos can be stored on the SD card but cannot be retrieved by the VMS.
- Added support for HTTP Strict Transport Security (HSTS).

Version 4.0.0.38 – Released Apr 17, 2020

New Features

- Improved night time object detection and classification accuracy. This improvement applies when the camera is in color mode in low lighting conditions and when the camera is in black and white IR mode.

Version 4.0.0.34 – Released Apr 3, 2020

New Features

- Small improvement to auto exposure accuracy in certain scenes
- Improved default image tuning values for noise, sharpness and saturation
- Increased maximum frame rate on 4MP and 5MP to 30 fps (60Hz mode) and 25 fps (50Hz mode) when WDR is enabled.
- When paired with ACC 7.6 or higher, and a face is detected, the native resolution of the camera is used to match faces and appearance searches on faces
- Added unusual activity detection for speed and location when paired with ACC 7.6 or higher

Issues Fixed

- Corrected minimum exposure limits for 4MP, 5MP, 6MP and 8MP cameras
- Added a check to ensure proper IP addresses or hostnames are used in the manual NTP server settings
- Image tuning update to correct for high bandwidth in certain scenes under linear mode.
- Corrected an issue where certain bounding boxes would appear in ACC live view but not in recorded view
- Fixed an issue where certain cameras may be stuck in slow shutter exposure mode
- Fixed an issue where UDP packet drops can occur in certain scenarios for cameras in HDSM 2.0 mode

Version 3.32.0.42 – Released Dec 16, 2019

New Features

- Security improvements.
- Added support for ethernet speed and duplex setting. The setting can be found in the Network tab under Setup on the camera's WebUI.
- Added support to enable/disable Tamper detection. The setting can be found in the Tamper Detection tab under Setup on the camera's WebUI.

Version 3.32.0.38 – Released Nov 20, 2019

New Features

- Improved face detection performance for use with Avigilon Control Center 7.4 facial recognition and appearance search functionality.

Version 3.32.0.30 – Released Oct 18, 2019

New Features

- Increased maximum frame rate for 6MP and 8MP cameras under WDR mode from 20 fps to 25 fps or 30 fps under 50Hz and 60Hz flicker modes respectively.
- Added 16 fps and 15 fps frame rate options under 50Hz and 60Hz flicker modes respectively.
- Allow the Subject Alternative Name to be set in the certificate signing request.

Issues Fixed

- Fixed an issue where an analytic event will not be sent to the VMS if the event name contains a special character.
- Reduced limit on the shortest possible exposure under WDR.
- Corrected the optimal iris position based on zoom position for 3.3-9mm lenses.
- Increased the available IR offset slider range for all lenses - Note that this firmware update will affect current IR focus offset positions and cameras will have to be readjusted after this firmware upgrade.
- Fixed an issue where cameras may not exit idle scene mode, to resume full frame rate on motion, in all cases.
- Fixed an issue where an 8MP H.265 video stream may stuttered when used in conjunction with HDSM 2.0.
- Fixed an issue where the 8MP camera will not enter WDR mode if the manual exposure is set to 1/8000.
- Fixed an issue where the Objects in Area analytic event may be triggered if a classified object moves through the region of interest.
- Fixed an issue where if a stationary object is already present in the region of interest and a second object moves through, the Objects in Area analytic event may not terminate until timeout of ~1 hour is reached.
- Fixed an issue where the Objects in Area analytic event may trigger multiple events even though the rule matches the correct number of objects specified.
- Fixed an issue where the Object Loitering analytic event may trigger multiple times for the same stationary object within the region of interest.
- Fixed an issue where the Object stops in area event may trigger before the configured threshold time is reached.
- Fixed an issue where the Object in Area analytic event may end if the vehicle object sub-class changes while in the region of interest.
- Fixed an issue where the direction violated analytic event may not trigger due to a fast moving vehicle object.

Version 3.32.0.20 – Released Sept 13, 2019

New Features

- Updated default imaging settings resulting in higher details.
- ONVIF Profile S and T conformance test passed.

Issues Fixed

- 8MP H.265 video stream stuttering at high bandwidth.
- Audio settings can now be configured by the Operator permission level.
- Get Imaging Service Options via ONVIF no longer reports an erroneous value.

Version 3.32.0.12 / 3.32.0.14 / 3.32.0.16

New Features

- Internal manufacturing fixes

Version 3.32.0.10 – Released Sept 3, 2019

New Features

- Initial release for H5A camera line

Known Issues

- Audio settings cannot be configured through the WebUI with the Operator permission level.
- Video stream may stutter at high bandwidth (>20Mbps) and at H.265 encoding for the 8MP variants. Recommended workaround: Reduce bandwidth cap
- ONVIF profile S and T compliance testing is in progress and H5A cameras will be certified in a future version.
- Cameras may not exit idle scene mode on all pixel motion events. Recommended workaround: keep the idle scene image rate to the same as the full motion image rate.
- Analytic events with a special character in the name will cause the event to not be sent.
- Automatic white balance in the 2MP variant while in WDR mode may be more blue in certain scenes and at lower lighting levels.
- Camera may not be able to enforce the bandwidth cap in very high bandwidth situations (for example, 40Mbps) with a very low bandwidth cap (for example, 1Mbps). Recommended workaround: Configure the camera with a reasonable image setting and encoding configuration.
- 8MP cameras may not enter WDR mode when exposure is manually set to 1/8000 of a second.