



Helpful downloads

- Operating and updating cameras: Alvium G1 Cameras User Guide
- Features: Alvium Features Reference
www.alliedvision.com/en/support/technical-documentation/alvium-gige-documentation
- Firmware files
www.alliedvision.com/en/support/firmware
- Firmware updater, included in **Vimba X**
www.alliedvision.com/en/products/software/vimba-x-sdk

Latest firmware version for your Alvium G1 model

The following table lists the latest firmware version for your Alvium G1 camera.

Models	FW version	Document release
Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-895m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c	FW 00.12.00.00611a22e updated notes	2023-Jul-04

Table 3: Latest firmware version by model

FW 00.12.00.00611a22e | updated notes

Date of **document update**: 2023-Jul-04

Date of document release: 2023-Jun-15

Supported models

Camera family	Model
Alvium	Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-895m/c , G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 4: Supported models

New model

Alvium G1-895m/c

Changed features

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added 12-bit sensor formats for cameras with 10-bit sensors for **PixelFormat**.
- Added Mono12Packed and BayerGR12Packed (G1-500c) or BayerRG12Packed (other models) for **PixelFormat**.

New features

- Support for mandatory features according to GenICam SFNC V2.7
- GigE Vision V2.2 support
- Scheduled action commands: Can be used the same way as action commands.
- LutValueAll** to write a complete LUT in one access
- MultipleRegions** subcategory in the **ImageFormatControl** category. The existence of this feature and available arrangement modes depend on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added **TestPendingAck** in the **TestControl** category.

Resolved issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
854	All	GP02 trigger direction error: GP02 can be set for both input and output, despite having only output capabilities.
890	All	GP02 is high during camera boot up for several seconds (usually 1 to 3 s).
967	All	BlackLevel is wrongly set after loading settings file: The camera incorrectly reports a BlackLevel value of θ , requiring it to be set to a different value and then reset to 0 in order to actually achieve a value of θ .

Table 5: Resolved issues (Sheet 1 of 2)

Alvium ID	Affected models	Description
976	All	Opto-isolated Input GPI3 status is inverted. As a workaround, the rising edge signal must be treated as a falling edge, and vice versa. Note: If you want to keep your existing setup using GPI3 unchanged, please keep the firmware version V 00.11 or below and do not update the firmware to higher versions for your Alvium G1 camera.
984	All	TransferQueueMaxBlockCount is incorrect when TransferControlMode is set to Automatic .
996	G1-510m/c	Sensor binning not working after digital binning has been used: After activating and deactivating sensor binning, binning cannot be set back to digital binning.
997	G1-510m/c	Disable of burst not working: Once the burst mode is activated by setting TransferControlMode to Automatic , it cannot be deactivated without performing a power cycle.
1041	G1-500m/c, G1-501m/c NIR, G1-1240m/c, G1-2050m/c	DPC (defect pixel correction) is not working when ReverseY is turned on: For rolling shutter models, defect pixels may appear after turning on ReverseY .

Table 5: Resolved issues (Sheet 2 of 2)

Known issues

Alvium ID	Affected models	Description
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.
856	All	DHCP server timeout issue: Acquisition may stop. Typically, temperature status still works.
961	All	Running with GigE Validation Framework v2.2 RC4, Alvium GigE cameras failed DataPacketHeaders_ByteOrder test.

Table 6: Known issues

FW 00.12.00.00611a22e

Date of document release: 2023-Jun-15

Supported models

Camera family	Model
Alvium	Alvium G1-030 VSWIR, G1-040m/c, G1-130 VSWIR, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 7: Supported models

New model

No new models were added.

Changed features

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added 12-bit sensor formats for cameras with 10-bit sensors for **PixelFormat**.
- Added **Mono12Packed** and **BayerGR12Packed** (G1-500c) or **BayerRG12Packed** (other models) for **PixelFormat**.

New features

- Support for mandatory features according to GenICam SFNC V2.7
- GigE Vision V2.2 support
- Scheduled action commands: Can be used the same way as action commands.
- **LutValueAll** to write a complete LUT in one access
- **MultipleRegions** subcategory in the **ImageFormatControl** category. The existence of this feature and available arrangement modes depend on the sensor. Please see the Alvium G1 User Guide or model data sheets.
- Added **TestPendingAck** in the **TestControl** category.

Resolved issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
854	All	GP02 trigger direction error: GP02 can be set for both input and output, despite having only output capabilities.
890	All	GP02 is high during camera boot up for several seconds (usually 1 to 3 s).
967	All	BlackLevel is wrongly set after loading settings file: The camera incorrectly reports a BlackLevel value of \emptyset , requiring it to be set to a different value and then reset to 0 in order to actually achieve a value of \emptyset .

Table 8: Resolved issues (Sheet 1 of 2)

Alvium ID	Affected models	Description
976	All	Opto-isolated Input GPI3 status is inverted. As a workaround, the rising edge signal must be treated as a falling edge, and vice versa. Note: If you want to keep your existing setup using GPI3 unchanged, please keep the firmware version V 00.11 or below and do not update the firmware to higher versions for your Alvium G1 camera.
984	All	TransferQueueMaxBlockCount is incorrect when TransferControlMode is set to Automatic .
996	G1-510m/c	Sensor binning not working after digital binning has been used: After activating and deactivating sensor binning, binning cannot be set back to digital binning.
997	G1-510m/c	Disable of burst not working: Once the burst mode is activated by setting TransferControlMode to Automatic , it cannot be deactivated without performing a power cycle.
1041	G1-500m/c, G1-501m/c NIR, G1-1240m/c, G1-2050m/c	DPC (defect pixel correction) is not working when ReverseY is turned on: For rolling shutter models, defect pixels may appear after turning on ReverseY .

Table 8: Resolved issues (Sheet 2 of 2)

Known issues

Alvium ID	Affected models	Description
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.
856	All	DHCP server timeout issue: Acquisition may stop. Typically, temperature status still works.
961	All	Running with GigE Validation Framework v2.2 RC4, Alvium GigE cameras failed DataPacketHeaders_ByteOrder test.

Table 9: Known issues

FW 00.11.00.9cf0c21e | updated

Date of **document update**: 2023-Jan-09

Date of document release: 2022-Nov-14

Supported models

Camera family	Model
Alvium	Alvium G1-030 VSWIR , G1-040m/c, G1-130 VSWIR , G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-812 UV , G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 10: Supported models

New model

Alvium **G1-030 VSWIR**, **G1-130 VSWIR**, G1-510m/c, **G1-812 UV**

Changed features

- **ActionControl** features have been tested and validated for proper function.
- The maximum value for **Gain** is increased to 48 dB for all models with Sony IMX global shutter sensors.
- Increments for **OffsetX** and **OffsetY** for camera models with Sony IMX global shutter sensor
- Reduced options for **SoftwareSignalSelector**

New features

- Counter features in the **CounterAndTimerControl** category
- Ethernet Flow Control (configurable on NICs and Ethernet devices)
- **LineDebounceDuration** and **LineDebounceMode** in the **DeviceControl** category
- **SequencerControl** category
- **TransferControl** category with features to acquire a sequence of images as a burst

Resolved issues

Alvium ID	Affected models	Description
806	Color models	Error in color transformation has been fixed.

Table 11: Resolved issues

Known issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.

Table 12: Known issues

FW 00.11.00.9cf0c21e

Date of document release: 2022-Nov-14

Supported models

Camera family	Model
Alvium	Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-510m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 13: Supported models

New model

Alvium G1-510m/c

Changed features

- **ActionControl** features have been tested and validated for proper function.
- The maximum value for **Gain** is increased to 48 dB for all models with Sony IMX global shutter sensors.
- Increments for **OffsetX** and **OffsetY** for camera models with Sony IMX global shutter sensor
- Reduced options for **SoftwareSignalSelector**

New features

- Counter features in the **CounterAndTimerControl** category
- Ethernet Flow Control (configurable on NICs and Ethernet devices)
- **LineDebounceDuration** and **LineDebounceMode** in the **DeviceControl** category
- **SequencerControl** category
- **TransferControl** category with features to acquire a sequence of images as a burst

Resolved issues

Alvium ID	Affected models	Description
806	Color models	Error in color transformation has been fixed.

Table 14: Resolved issues

Known issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.

Table 15: Known issues

FW 00.10.00.2cf3b22e | corrected

Date of **document update**: 2022-Aug-08

Date of document release: 2022-Jul-20

Supported models

Corrected: Alvium **G1-235m/c** is not included.

Camera family	Model
Alvium	Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 16: Supported models

New model

Alvium G1-234m/c

Changed features

In previous firmware versions, **BlackLevel** values were adjusted to the pixel formats: 8-bit values for 8-bit pixel formats, 10 for 10, and 12 for 12. With this firmware update, the representation of **BlackLevel** is independent from the pixel format: 12-bit values are used for all pixel formats. Therefore, you may have to adjust your settings used with previous firmware versions.

Corrected: The maximum value for **Gain** is still **24 dB** for all models with Sony IMX global shutter sensors.

New features

- **ActionControl** category: The features are not working properly yet. This will be fixed in the next firmware release.
- **GVCP** subcategory
- **PTPCControl** category
- **SerialHub** subcategory for I/O control by UART
- **SoftwareSignalControl** subcategory to enable external devices to trigger actions within the camera by software commands (The features in this category are still in the testing phase and not fully validated.)

Known issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.

Table 17: Known issues

FW 00.10.00.2cf3b22e

Date of document release: 2022-Jul-20

Note: Data on this page is incorrect. Please see Chapter [FW 00.10.00.2cf3b22e](#) | [corrected](#) on page 8.

Supported models

Camera family	Model
Alvium	Alvium G1-040m/c, G1-158m/c, G1-234m/c, G1-235m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2040m/c, G1-2050m/c, G1-2460m/c

Table 18: Supported models

New models

Alvium G1-234m/c, G1-235m/c

Changed features

In previous firmware versions, **BlackLevel** values were adjusted to the pixel formats: 8-bit values for 8-bit pixel formats, 10 for 10, and 12 for 12. With this firmware update, the representation of **BlackLevel** is independent from the pixel format: 12-bit values are used for all pixel formats. Therefore, you may have to adjust your settings used with previous firmware versions.

The maximum value for **Gain** was increased from 24 to 48 dB for all models with Sony IMX global shutter sensors.

New features

- **ActionControl** category: The features are not working properly yet. This will be fixed in the next firmware release.
- **GVCP** subcategory
- **PTPControl** category
- **SerialHub** subcategory for I/O control by UART
- **SoftwareSignalControl** subcategory to enable external devices to trigger actions within the camera by software commands (The features in this category are still in the testing phase and not fully validated.)

Known issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.

Table 19: Known issues

FW 00.09.00.e23cb4e8

Date of document release: 2022-May-04

Supported models

Camera family	Model
Alvium	Alvium G1-040m/c, G1-158m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2050m/c, G1-2050m/c, G1-2460m/c

Table 20: Supported models

New models

Initial commercial release of Alvium G1-040m/c, G1-158m/c, G1-240m/c, G1-319m/c, G1-500m/c, G1-507m/c, G1-811m/c, G1-1236m/c, G1-1242m/c, G1-1620m/c, G1-2050m/c, G1-2050m/c, G1-2460m/c

New features

Initial feature set

Known issues

Alvium ID	Affected models	Description
251	G1-2050m/c	If ShutterMode is changed after image acquisition, the ExposureActive signal disappears.
253	All	Auto mode feature IntensityControllerOutliersDark does not work properly.
338	G1-500m/c, G1-2050m/c	If AcquisitionStop is executed shortly after AcquisitionStart , no image is transmitted.

Table 21: Known issues

Contact us

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General

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Distribution partners

www.alliedvision.com/en/avt-locations/avt-distributors

Support

www.alliedvision.com/en/support

www.alliedvision.com/en/about-us/contact-us/technical-support-repair-/rma

Current firmware and release notes

<https://www.alliedvision.com/en/support/firmware-downloads>

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