

## CSI-2 FIRMWARE RELEASE NOTES

### Alvium 1500 C, 1800 C, FP3, and GM2 cameras

2023-Nov-21  
V00.12.00.00611a22



#### Helpful downloads

- Operating and updating cameras:
  - Alvium CSI-2 Cameras User Guide
  - Alvium FP3/GM2 User Guide
- Controls for **Direct Register Access**: Alvium CSI-2 Register Controls Reference
- Features for **GeniCam for CSI-2 Access**: Alvium Features Reference  
[www.alliedvision.com/en/support/technical-documentation/alvium-csi-2-documentation](http://www.alliedvision.com/en/support/technical-documentation/alvium-csi-2-documentation)
- Firmware files  
[www.alliedvision.com/en/support/firmware](http://www.alliedvision.com/en/support/firmware)
- Firmware updater, included in **Vimba X**  
[www.alliedvision.com/en/products/software/vimba-x-sdk](http://www.alliedvision.com/en/products/software/vimba-x-sdk)

## Latest firmware version for your Alvium CSI-2 model

The following table lists the latest firmware version for your Alvium CSI-2 camera.

Model	FW version	Document release
<b>Alvium 1500 C:</b> -120m/c, -210m/c, -500m/c,-501 m/c NIR <b>Alvium 1800 C:</b> -030 VSWIR, -040m/c, -052m/c, -130 VSWIR, -158m/c, -203m/c,-234m/c, -235m/c, -203m/c,-240m/c, -291m/c, -319m/c, -500m/c, -507m/c, -508m/c, -510m/c, -511 m/c, -811 m/c, -812 UV, -895m/c, -1236m/c, -1240m/c, -1242m/c, -1620m/c, -2040m/c, -2050m/c, -2460m/c <b>Alvium FP3/GM2 Coax/STP:</b> -030 VSWIR, -040m/c, -052m/c, -130 VSWIR, -158m/c, -203m/c, -210m/c, -234m/c, -235m/c, -240m/c, -291m/c, -319m/c, -500m/c,-501m/c NIR, -507m/c, -508m/c, -510m/c,-511 m/c, -811 m/c, -812 UV, -895m/c, -1236m/c, -1240m/c, -1242m/c, -1620m/c, -2040m/c, -2050m/c, -2460m/c	<a href="#">FW 00.12.00.00611a22</a>   4th update	2023-Nov-21
<b>Alvium 1500 C:</b> -050m/c <sup>1</sup>	<a href="#">FW 00.11.00.9cf0c21e</a>   2nd update	2023-Apr-21

<sup>1</sup> Alvium 1800 C-050 models are delivered with firmware 00.11.00.9cf0c21e. The firmware version cannot be updated to later versions.

Table 3: Latest firmware version by model



#### Alvium X-

X is used as a placeholder for 1500 C, 1800 C, FP3, or GM2. This convention is used first with FW version 00.11.00.9cf0c21e, document version 2023-Apr-21.

## FW 00.12.00.00611a22 | 4th update

Date of **4th document update**: 2023-Nov-21

Date of 3rd document update: 2023-Sep-27

Date of 2nd document update: 2023-Aug-02

Date of 1st document update: 2023-Jul-04

Date of document release: 2023-Jun-15



### Removed contents

- Alvium X-131m/c,-192m/c models were not released.
- 12-bit pixel formats for cameras with 10-bit sensors are already added with [FW 00.08.00.6727174b](#) on page 19.
- 12-bit Packed pixel formats were added only for Alvium G1 and G5.

## Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-203m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-895m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c
Alvium FP3 Coax/STP	FP3-030 VSWIR, FP3-040m/c, FP3-052m/c, FP3-130 VSWIR, FP3-158m/c, FP3-203m/c, FP3-210m/c, FP3-234m/c, FP3-235m/c, FP3-240m/c, FP3-291m/c, FP3-319m/c, FP3-500m/c, FP3-501m/c NIR, FP3-507m/c, FP3-508m/c, FP3-510m/c, FP3-511 m/c, FP3-811 m/c, FP3-812 UV, FP3-895m/c, FP3-1236m/c, FP3-1240m/c, FP3-1242m/c, FP3-1620m/c, FP3-2040m/c, FP3-2050m/c, FP3-2460m/c
Alvium GM2 Coax/STP	GM2-030 VSWIR, GM2-040m/c, GM2-052m/c, GM2-130 VSWIR, GM2-158m/c, GM2-203m/c, GM2-210m/c, GM2-234m/c, GM2-235m/c, GM2-240m/c, GM2-291m/c, GM2-319m/c, GM2-500m/c, GM2-501m/c NIR, GM2-507m/c, GM2-508m/c, GM2-510m/c, GM2-511 m/c, GM2-811 m/c, GM2-812 UV, GM2-895m/c, GM2-1236m/c, GM2-1240m/c, GM2-1242m/c, GM2-1620m/c, GM2-2040m/c, GM2-2050m/c, GM2-2460m/c

Table 4: Supported models

## New models

Alvium X-203m/c models

## Changed features (GenICam for CSI-2 Access)\*

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium CSI Cameras User Guide or model data sheets.

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

## New features (GenICam for CSI-2 Access)\*

- Support for mandatory features according to GenICam SFNC V2.7
- **LutValueAll** to write a complete LUT in one access

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.
967	All	<b>BlackLevel</b> is wrongly set after loading settings file: The camera incorrectly reports a <b>BlackLevel</b> 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 $\emptyset$ .
1041	X-500m/c, X-501m/c NIR, X-1240m/c, X-2050m/c	DPC (defect pixel correction) is not working when <b>ReverseY</b> is turned on: For rolling shutter models, defect pixels may appear after turning on <b>ReverseY</b> .

Table 5: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return $\emptyset$ , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
774	Models in <b>GenICam for CSI-2 Access</b> mode	Streaming is not possible with changed user set. As a workaround, we recommend to load default user sets. This issue does <b>only</b> occur with Nano 4GB Board and Driver 4.6.x.
1117	X-510m/c, X-511m/c, X-811m/c, X-812 UV, X-1242m/c, X-1620m/c, X-2040m/c, X-2460m/c models in <b>GenICam for CSI-2 Access</b> mode	Width cannot be adjusted for both, digital binning and sensor binning. Digital binning works correctly in <b>Direct Register Access</b> mode and in <b>Video4Linux Access</b> mode.

Table 6: Known issues

## FW 00.12.00.00611a22 | 3rd update

Date of **3rd document update**: 2023-Sep-27

Date of 2nd document update: 2023-Aug-02

Date of 1st document update: 2023-Jul-04

Date of document release: 2023-Jun-15

### Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, <b>C-131m/c</b> , C-158m/c, <b>C-192m/c</b> , <b>C-203m/c</b> , C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-895m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c
Alvium FP3 Coax/STP	FP3-030 VSWIR, FP3-040m/c, FP3-052m/c, FP3-130 VSWIR, <b>FP3-131m/c</b> , FP3-158m/c, <b>FP3-192m/c</b> , <b>FP3-203m/c</b> , FP3-210m/c, FP3-234m/c, FP3-235m/c, FP3-240m/c, FP3-291m/c, FP3-319m/c, FP3-500m/c, FP3-501m/c NIR, FP3-507m/c, FP3-508m/c, FP3-510m/c, FP3-511 m/c, FP3-811 m/c, FP3-812 UV, FP3-895m/c, FP3-1236m/c, FP3-1240m/c, FP3-1242m/c, FP3-1620m/c, FP3-2040m/c, FP3-2050m/c, FP3-2460m/c
Alvium GM2 Coax/STP	GM2-030 VSWIR, GM2-040m/c, GM2-052m/c, GM2-130 VSWIR, <b>GM2-131m/c</b> , GM2-158m/c, <b>GM2-192m/c</b> , <b>GM2-203m/c</b> , GM2-210m/c, GM2-234m/c, GM2-235m/c, GM2-240m/c, GM2-291m/c, GM2-319m/c, GM2-500m/c, GM2-501m/c NIR, GM2-507m/c, GM2-508m/c, GM2-510m/c, GM2-511 m/c, GM2-811 m/c, GM2-812 UV, GM2-895m/c, GM2-1236m/c, GM2-1240m/c, GM2-1242m/c, GM2-1620m/c, GM2-2040m/c, GM2-2050m/c, GM2-2460m/c

Table 7: Supported models

### New models

**Alvium X-131m/c, -192m/c, -203m/c models**

### Changed features (GenICam for CSI-2 Access)\*

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium CSI Cameras User Guide or model data sheets.
- **Added 12-bit sensor formats for cameras with 10-bit sensors for PixelFormat.**
- **Added Mono12Packed and BayerGR12Packed (1800 C-500c) or BayerRG12Packed (other models) for PixelFormat.**

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

### New features (GenICam for CSI-2 Access)\*

- Support for mandatory features according to GenICam SFNC V2.7
- **LutValueAll** to write a complete LUT in one access

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.
967	All	<b>BlackLevel</b> is wrongly set after loading settings file: The camera incorrectly reports a <b>BlackLevel</b> 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 $\emptyset$ .
1041	X-500m/c, X-501m/c NIR, X-1240m/c, X-2050m/c	DPC (defect pixel correction) is not working when <b>ReverseY</b> is turned on: For rolling shutter models, defect pixels may appear after turning on <b>ReverseY</b> .

Table 8: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return $\emptyset$ , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
774	Models in <b>GenICam for CSI-2 Access</b> mode	Streaming is not possible with changed user set. As a workaround, we recommend to load default user sets. This issue does <b>only</b> occur with Nano 4GB Board and Driver 4.6.x.
1117	X-510m/c, X-511m/c, X-811m/c, X-812 UV, X-1242m/c, X-1620m/c, X-2040m/c, X-2460m/c models in <b>GenICam for CSI-2 Access</b> mode	Width cannot be adjusted for both, digital binning and sensor binning. Digital binning works correctly in <b>Direct Register Access</b> mode and in <b>Video4Linux Access</b> mode.

Table 9: Known issues

## FW 00.12.00.00611a22 | 2nd update

Date of **2nd document update**: 2023-Aug-02

Date of 1st document update: 2023-Jul-04

Date of document release: 2023-Jun-15

### Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-895m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c
Alvium FP3 Coax/ <b>STP</b>	FP3-030 VSWIR, FP3-040m/c, FP3-052m/c, FP3-130 VSWIR, FP3-158m/c, FP3-210m/c, FP3-234m/c, FP3-235m/c, FP3-240m/c, FP3-291m/c, FP3-319m/c, FP3-500m/c, FP3-501m/c NIR, FP3-507m/c, FP3-508m/c, FP3-510m/c, FP3-511 m/c, FP3-811 m/c, FP3-812 UV, FP3-895m/c, FP3-1236m/c, FP3-1240m/c, FP3-1242m/c, FP3-1620m/c, FP3-2040m/c, FP3-2050m/c, FP3-2460m/c
Alvium GM2 Coax/ <b>STP</b>	GM2-030 VSWIR, GM2-040m/c, GM2-052m/c, GM2-130 VSWIR, GM2-158m/c, GM2-210m/c, GM2-234m/c, GM2-235m/c, GM2-240m/c, GM2-291m/c, GM2-319m/c, GM2-500m/c, GM2-501m/c NIR, GM2-507m/c, GM2-508m/c, GM2-510m/c, GM2-511 m/c, GM2-811 m/c, GM2-812 UV, GM2-895m/c, GM2-1236m/c, GM2-1240m/c, GM2-1242m/c, GM2-1620m/c, GM2-2040m/c, GM2-2050m/c, GM2-2460m/c

Table 10: Supported models

### New models

#### Alvium FP3/GM2 STP models

### Changed features

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium CSI Cameras User Guide or model data sheets. (**GenICam for CSI-2 Access**)\*

### New features

- Support for mandatory features according to GenICam SFNC V2.7 (**GenICam for CSI-2 Access**)\*
- LutValueAll** to write a complete LUT in one access (**GenICam for CSI-2 Access**)\*

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.
967	All	<b>BlackLevel</b> is wrongly set after loading settings file: The camera incorrectly reports a <b>BlackLevel</b> 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 $\emptyset$ .
1041	X-500m/c, X-501m/c NIR, X-1240m/c, X-2050m/c	DPC (defect pixel correction) is not working when <b>ReverseY</b> is turned on: For rolling shutter models, defect pixels may appear after turning on <b>ReverseY</b> .

Table 11: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return $\emptyset$ , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
774	Models in <b>GenICam for CSI-2 Access</b> mode	Streaming is not possible with changed user set. As a workaround, we recommend to load default user sets. This issue does <b>only</b> occur with Nano 4GB Board and Driver 4.6.x.
1117	X-510m/c, X-511m/c, X-811m/c, X-812 UV, X-1242m/c, X-1620m/c, X-2040m/c, X-2460m/c models in <b>GenICam for CSI-2 Access</b> mode	Width cannot be adjusted for both, digital binning and sensor binning. Digital binning works correctly in <b>Direct Register Access</b> mode and in <b>Video4Linux Access</b> mode.

Table 12: Known issues

## FW 00.12.00.00611a22 | 1st update

Date of **1st document update**: 2023-Jul-04

Date of document release: 2023-Jun-15

### Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, <b>C-895m/c</b> , C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c
Alvium FP3 Coax	FP3-030 VSWIR Coax, FP3-040m/c Coax, FP3-052m/c Coax, FP3-130 VSWIR Coax, FP3-158m/c Coax, FP3-210m/c Coax, FP3-234m/c Coax, FP3-235m/c Coax, FP3-240m/c Coax, FP3-291m/c Coax, FP3-319m/c Coax, FP3-500m/c Coax, FP3-501m/c NIR Coax, FP3-507m/c Coax, FP3-508m/c Coax, FP3-510m/c Coax, FP3-511 m/c Coax, FP3-811 m/c Coax, FP3-812 UV Coax, <b>FP3-895m/c Coax</b> , FP3-1236m/c Coax, FP3-1240m/c Coax, FP3-1242m/c Coax, FP3-1620m/c Coax, FP3-2040m/c Coax, FP3-2050m/c Coax, FP3-2460m/c Coax
Alvium GM2 Coax	GM2-030 VSWIR Coax, GM2-040m/c Coax, GM2-052m/c Coax, GM2-130 VSWIR Coax, GM2-158m/c Coax, GM2-210m/c Coax, GM2-234m/c Coax, GM2-235m/c Coax, GM2-240m/c Coax, GM2-291m/c Coax, GM2-319m/c Coax, GM2-500m/c Coax, GM2-501m/c NIR Coax, GM2-507m/c Coax, GM2-508m/c Coax, GM2-510m/c Coax, GM2-511 m/c Coax, GM2-811 m/c Coax, GM2-812 UV Coax, <b>GM2-895m/c Coax</b> , GM2-1236m/c Coax, GM2-1240m/c Coax, GM2-1242m/c Coax, GM2-1620m/c Coax, GM2-2040m/c Coax, GM2-2050m/c Coax, GM2-2460m/c Coax

Table 13: Supported models

### New models

**Alvium X-895m/c**

### Changed features

- Added **Sensor** option for **BinningSelector**. The existence of this option depends on the sensor. Please see the Alvium CSI Cameras User Guide or model data sheets. (**GenICam for CSI-2 Access**)\*

### New features

- Support for mandatory features according to GenICam SFNC V2.7 (**GenICam for CSI-2 Access**)\*
- LutValueAll** to write a complete LUT in one access (**GenICam for CSI-2 Access**)\*

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models



## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.
967	All	<b>BlackLevel</b> is wrongly set after loading settings file: The camera incorrectly reports a <b>BlackLevel</b> 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 $\emptyset$ .
1041	X-500m/c, X-501m/c NIR, X-1240m/c, X-2050m/c	DPC (defect pixel correction) is not working when <b>ReverseY</b> is turned on: For rolling shutter models, defect pixels may appear after turning on <b>ReverseY</b> .

Table 14: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return $\emptyset$ , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
774	Models in <b>GenICam for CSI-2 Access</b> mode	Streaming is not possible with changed user set. As a workaround, we recommend to load default user sets. This issue does <b>only</b> occur with Nano 4GB Board and Driver 4.6.x.
1117	X-510m/c, X-511m/c, X-811m/c, X-812 UV, X-1242m/c, X-1620m/c, X-2040m/c, X-2460m/c models in <b>GenICam for CSI-2 Access</b> mode	Width cannot be adjusted for both, digital binning and sensor binning. Digital binning works correctly in <b>Direct Register Access</b> mode and in <b>Video4Linux Access</b> mode.

Table 15: Known issues

## FW 00.12.00.00611a22

Date of document release: 2023-Jun-15

### Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c
Alvium FP3 Coax	FP3-030 VSWIR Coax, FP3-040m/c Coax, FP3-052m/c Coax, FP3-130 VSWIR Coax, FP3-158m/c Coax, FP3-210m/c Coax, FP3-234m/c Coax, FP3-235m/c Coax, FP3-240m/c Coax, FP3-291m/c Coax, FP3-319m/c Coax, FP3-500m/c Coax, FP3-501m/c NIR Coax, FP3-507m/c Coax, FP3-508m/c Coax, FP3-510m/c Coax, FP3-511 m/c Coax, FP3-811 m/c Coax, FP3-812 UV Coax, FP3-1236m/c Coax, FP3-1240m/c Coax, FP3-1242m/c Coax, FP3-1620m/c Coax, FP3-2040m/c Coax, FP3-2050m/c Coax, FP3-2460m/c Coax
Alvium GM2 Coax	GM2-030 VSWIR Coax, GM2-040m/c Coax, GM2-052m/c Coax, GM2-130 VSWIR Coax, GM2-158m/c Coax, GM2-210m/c Coax, GM2-234m/c Coax, GM2-235m/c Coax, GM2-240m/c Coax, GM2-291m/c Coax, GM2-319m/c Coax, GM2-500m/c Coax, GM2-501m/c NIR Coax, GM2-507m/c Coax, GM2-508m/c Coax, GM2-510m/c Coax, GM2-511 m/c Coax, GM2-811 m/c Coax, GM2-812 UV Coax, GM2-1236m/c Coax, GM2-1240m/c Coax, GM2-1242m/c Coax, GM2-1620m/c Coax, GM2-2040m/c Coax, GM2-2050m/c Coax, GM2-2460m/c Coax

Table 16: Supported models

### New models

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 CSI Cameras User Guide or model data sheets. (**GenICam for CSI-2 Access**)\*

### New features

- Support for mandatory features according to GenICam SFNC V2.7 (**GenICam for CSI-2 Access**)\*
- LutValueAll** to write a complete LUT in one access (**GenICam for CSI-2 Access**)\*

\* Available with all Alvium 1800 C models and the corresponding FP3/GM2 Coax models

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.
967	All	<b>BlackLevel</b> is wrongly set after loading settings file: The camera incorrectly reports a <b>BlackLevel</b> 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 $\emptyset$ .
1041	X-500m/c, X-501m/c NIR, X-1240m/c, X-2050m/c	DPC (defect pixel correction) is not working when <b>ReverseY</b> is turned on: For rolling shutter models, defect pixels may appear after turning on <b>ReverseY</b> .

Table 17: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return $\emptyset$ , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
774	Models in <b>GenICam for CSI-2 Access</b> mode	Streaming is not possible with changed user set. As a workaround, we recommend to load default user sets. This issue does <b>only</b> occur with Nano 4GB Board and Driver 4.6.x.
1117	X-510m/c, X-511m/c, X-811m/c, X-812 UV, X-1242m/c, X-1620m/c, X-2040m/c, X-2460m/c models in <b>GenICam for CSI-2 Access</b> mode	Width cannot be adjusted for both, digital binning and sensor binning. Digital binning works correctly in <b>Direct Register Access</b> mode and in <b>Video4Linux Access</b> mode.

Table 18: Known issues

## FW 00.11.00.9cf0c21e | 2nd update

Date of **2nd document update**: 2023-Apr-21

Date of document release: 2022-Nov-14

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 19: Supported models (Sheet 1 of 2)

Camera family	Model
Alvium FP3 Coax	FP3-030 VSWIR Coax, FP3-040m/c Coax, FP3-052m/c Coax, FP3-130 VSWIR Coax, FP3-158m/c Coax, FP3-210m/c Coax, FP3-234m/c Coax, FP3-235m/c Coax, FP3-240m/c Coax, FP3-291m/c Coax, FP3-319m/c Coax, FP3-500m/c Coax, FP3-501m/c NIR Coax, FP3-507m/c Coax, FP3-508m/c Coax, FP3-510m/c Coax, FP3-511 m/c Coax, FP3-811 m/c Coax, FP3-812 UV Coax, FP3-1236m/c Coax, FP3-1240m/c Coax, FP3-1242m/c Coax, FP3-1620m/c Coax, FP3-2040m/c Coax, FP3-2050m/c Coax, FP3-2460m/c Coax
Alvium GM2 Coax	GM2-030 VSWIR Coax, GM2-040m/c Coax, GM2-052m/c Coax, GM2-130 VSWIR Coax, GM2-158m/c Coax, GM2-210m/c Coax, GM2-234m/c Coax, GM2-235m/c Coax, GM2-240m/c Coax, GM2-291m/c Coax, GM2-319m/c Coax, GM2-500m/c Coax, GM2-501m/c NIR Coax, GM2-507m/c Coax, GM2-508m/c Coax, GM2-510m/c Coax, GM2-511 m/c Coax, GM2-811 m/c Coax, GM2-812 UV Coax, GM2-1236m/c Coax, GM2-1240m/c Coax, GM2-1242m/c Coax, GM2-1620m/c Coax, GM2-2040m/c Coax, GM2-2050m/c Coax, GM2-2460m/c Coax

Table 19: Supported models (Sheet 2 of 2)

## New models

### Alvium 1800 C-510m/c

**Alvium FP3 Coax:** FP3-030 VSWIR Coax, FP3-040m/c Coax, FP3-052m/c Coax, FP3-130 VSWIR Coax, FP3-158m/c Coax, FP3-210m/c Coax, FP3-234m/c Coax, FP3-235m/c Coax, FP3-240m/c Coax, FP3-291m/c Coax, FP3-319m/c Coax, FP3-500m/c Coax, FP3-501m/c NIR Coax, FP3-507m/c Coax, FP3-508m/c Coax, FP3-510 m/c Coax, FP3-511 m/c Coax, FP3-811 m/c Coax, FP3-812 UV Coax, FP3-1236m/c Coax, FP3-1240m/c Coax, FP3-1242m/c Coax, FP3-1620m/c Coax, FP3-2040m/c Coax, FP3-2050m/c Coax, FP3-2460m/c Coax

**Alvium GM-2 Coax:** GM2-030 VSWIR Coax, GM2-040m/c Coax, GM2-052m/c Coax, GM2-130 VSWIR Coax, GM2-158m/c Coax, GM2-210m/c Coax, GM2-234m/c Coax, GM2-235m/c Coax, GM2-240m/c Coax, GM2-291m/c Coax, GM2-319m/c Coax, GM2-500m/c Coax, GM2-501m/c NIR Coax, GM2-507m/c Coax, GM2-508m/c Coax, GM2-510m/c Coax, GM2-511 m/c Coax, GM2-811 m/c Coax, GM2-812 UV Coax, GM2-1236m/c Coax, GM2-1240m/c Coax, GM2-1242m/c Coax, GM2-1620m/c Coax, GM2-2040m/c Coax, GM2-2050m/c Coax, GM2-2460m/c Coax

## Changed features

- Increments for Offset X and Offset Y for camera models with Sony IMX global shutter sensor
- Reduced options for SoftwareSignalSelector (**GenICam for CSI-2 Access**)\*

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050 and the corresponding FP3/GM2 Coax models

## New features

Available with **GenICam for CSI-2 Access**:\*

- Counter features in the CounterAndTimerControl category
- LineDebounceDuration and LineDebounceMode in the DeviceControl category

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050 and the corresponding FP3/GM2 Coax models

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.

Table 20: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <code>StatFramesCRCError</code> , <code>StatFramesIncomplete</code> , <code>StatFramesUnderrun</code> in the <code>StreamInformation/Statistics</code> category return <code>0</code> , incomplete or dropped frames cannot be detected.
338	X-210m/c, X-500m/c, X-501m/c, X-1240m/c, X-2050m/c	If <code>Acquisition Stop</code> is executed shortly after <code>Acquisition Start</code> , no image is transmitted.

X = Placeholder for 1500 C, 1800 C, FP3 Coax, or GM2 Coax where models are available.

Table 21: Known issues

## FW 00.11.00.9cf0c21e | updated notes

Date of **document update**: 2022-Dec-19

Date of document release: 2022-Nov-14

**Note**: Data of this note entry is outdated. Please see [FW 00.11.00.9cf0c21e | 2nd update](#) on page 11.

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 22: Supported models

## New models

Alvium 1800 C-510m/c

## Changed features

- Increments for Offset X and Offset Y for camera models with Sony IMX global shutter sensor
- Reduced options for SoftwareSignalSelector (**GenICam for CSI-2 Access**)\*

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050

## New features

Available with **GenICam for CSI-2 Access**:\*

- Counter features in the `CounterAndTimerControl` category
- `LineDebounceDuration` and `LineDebounceMode` in the `DeviceControl` category

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.

Table 23: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <code>StatFramesCRCError</code> , <code>StatFramesIncomplete</code> , <code>StatFramesUnderrun</code> in the <code>StreamInformation/Statistics</code> category return <code>0</code> , incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <code>Acquisition Stop</code> is executed shortly after <code>Acquisition Start</code> , no image is transmitted.

Table 24: Known issues

## FW 00.11.00.9cf0c21e

Date of document release: 2022-Nov-14

**Note:** Data of this note entry is outdated. Please see [FW 00.11.00.9cf0c21e | updated notes](#) on page 13.

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-234m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-510m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 25: Supported models

## New models

Alvium 1800 C-510m/c

## Changed features

- Increments for Offset X and Offset Y for camera models with Sony IMX global shutter sensor
- Reduced options for SoftwareSignalSelector (**GenICam for CSI-2 Access**)\*

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050

## New features

Available with **GenICam for CSI-2 Access**.\*

- **To be removed:** ActionControl category
- Counter features in the CounterAndTimerControl category
- LineDebounceDuration and LineDebounceMode in the DeviceControl category

\* Available with Alvium 1800 C-234, C-235, C-500, C-507, C-511, C-1236, C-2050

## Resolved issues

Alvium ID	Affected models	Description
806	Color models in <b>GenICam for CSI-2 Access</b> mode	Error in color transformation has been fixed.

Table 26: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features StatFramesCRCError, StatFramesIncomplete, StatFramesUnderrun in the StreamInformation/Statistics category return 0, incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If Acquisition Stop is executed shortly after Acquisition Start, no image is transmitted.

Table 27: Known issues

## FW 00.10.00.6c9062b1 | updated notes

Date of **note updates**: 2022-Aug-16

Date of document release: 2022-Jul-20

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 28: Supported models

## New models

Alvium 1800 C-234m/c, C-812 UV

## Changed features

In previous firmware versions, Black Level 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 Black Level 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. **Added information:** For Alvium 1800 C-030 VSWIR and C-130 VSWIR, the maximum Gain value was increased to 42 dB.

**Added information:** FPNC was disabled for Alvium 1800 C-030 VSWIR and 1800 C-130 VSWIR models.

## Resolved issues

Alvium ID	Affected models	Description
721	Models in <b>GenICam for CSI-2 Access</b> mode	<b>TestPattern</b> has been visible on CSI-2 cameras, but the feature was not working properly. The feature has been removed.

Table 29: Resolved issues

## Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return 0, incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.

Table 30: Known issues



## FW 00.10.00.6c9062b1

Date of document release: 2022-Jul-20

**Note:** Data of this note entry is outdated. Please see [FW 00.10.00.6c9062b1 | updated notes](#) on page 15.

### Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-235m/c, C-240m/c, C-291m/c, C-319m/c, C-500m/c, C-507m/c, C-508m/c, C-511 m/c, C-811 m/c, C-812 UV, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 31: Supported models

### New models

Alvium 1800 C-234m/c, C-812 UV

### Changed features

In previous firmware versions, Black Level 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 Black Level 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

Available with Alvium 1800 C-500, C-507, C-511, C-1236, C-2050, using **GenICam for CSI-2 Access**:

- Serial Hub subcategory for I/O control by UART
- Software Signal Control 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.)

### Resolved issues

Alvium ID	Affected models	Description
721	Models in <b>GenICam for CSI-2 Access</b> mode	<b>TestPattern</b> has been visible on CSI-2 cameras, but the feature was not working properly. The feature has been removed.

Table 32: Resolved issues

### Known issues

Alvium ID	Affected models	Description
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.

Table 33: Known issues (Sheet 1 of 2)

Alvium ID	Affected models	Description
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <code>StatFramesCRCError</code> , <code>StatFramesIncomplete</code> , <code>StatFramesUnderrun</code> in the <code>StreamInformation/Statistics</code> category return <code>0</code> , incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <code>Acquisition Stop</code> is executed shortly after <code>Acquisition Start</code> , no image is transmitted.

Table 33: Known issues (Sheet 2 of 2)

## FW 00.08.01.13f227a4

Date of document release: 2022-May-16

### Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-500m/c

Table 34: Supported models

### New models

No new models were added.

### New features

No features were added.

### Resolved issues

Alvium ID	Affected models	Description
775	1500 C-120c, 1500 C-210c, 1500 C-500c, 1500 C-501c NIR, 1800 C-500c	Wrong <code>AutoWhiteBalance</code> measurement was fixed.

Table 35: Resolved issues

### Known issues

Alvium ID	Affected models	Description
721	Models in <b>GenICam for CSI-2 Access</b> mode	<code>TestPattern</code> is visible on CSI-2 cameras, but the feature is not working properly. If the test pattern value is changed, the embedded board must be rebooted twice before the camera can be operated again.
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.

Table 36: Known issues (Sheet 1 of 2)

Alvium ID	Affected models	Description
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <code>StatFramesCRCError</code> , <code>StatFramesIncomplete</code> , <code>StatFramesUnderrun</code> in the <code>StreamInformation/Statistics</code> category return <code>0</code> , incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <code>Acquisition Stop</code> is executed shortly after <code>Acquisition Start</code> , no image is transmitted.

Table 36: Known issues (Sheet 2 of 2)

## FW 00.08.00.6727174b

Date of document release: 2022-Mar-21

### Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-052m/c, C-130 VSWIR, C-158m/c, C-240m/c, C-291m/c, C-319m/c, C-507m/c, C-508m/c, C-500m/c, C-511 m/c, C-811 m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 37: Supported models

### New models

Alvium 1800 C-052m/c, C-291m/c, C-500m/c

### New features



#### Contents updated subsequently

The information on support for 12-bit pixel formats for cameras with 10-bit sensors was added on 2023-Nov-21.

### GenICam for CSI-2 Access for 1800 C-500, C-507, C-511, C-1236, C-2050

This includes the following features:

- 12-bit for `PixelFormat` for cameras with 10-bit sensors
- Auto Mode Regions feature group
- Contrast
- Convolution filters for image processing
- Counter and Timer Control category
- Digital binning
- Exposure Active Mode
- Look-up table (LUT)
- Shutter Mode
- Stream Information features for MIPI CSI-2
- Transport Layer Control: Additional features for CSI-2

- Triggering: Additional features and options
- User Sets

## Known issues

Alvium ID	Affected models	Description
721	Models in <b>GenICam for CSI-2 Access</b> mode	<b>TestPattern</b> is visible on CSI-2 cameras, but the feature is not working properly. If the test pattern value is changed, the embedded board must be rebooted twice before the camera can be operated again.
617	Models in <b>GenICam for CSI-2 Access</b> mode	Feature settings are lost when the camera is closed. After restart, features must be set manually again.
OCT-2247	Models in <b>GenICam for CSI-2 Access</b> mode	Features <b>StatFramesCRCError</b> , <b>StatFramesIncomplete</b> , <b>StatFramesUnderrun</b> in the <b>StreamInformation/Statistics</b> category return 0, incomplete or dropped frames cannot be detected.
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.

Table 38: Known issues

## FW 00.07.00.81db3896

Date of document release: 2021-Dec-10

**Note:** Binning controls were stated as new features in the version from 2021-Dec-10 of this document. This information had to be removed from the document because the current camera driver does not support binning.

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-030 VSWIR, C-040m/c, C-130 VSWIR, C-158m/c, C-240m/c, C-319m/c, C-507m/c, C-508m/c, C-511 m/c, C-811 m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 39: Supported models

## New models

Alvium 1800 C-030 VSWIR, C-130 VSWIR

## New features

- Configurable I2C address
- Monochrome image output from color models

## Resolved issues

Alvium ID	Affected models	Description
395	All	After <b>Acquisition Stop</b> has been executed on a camera streaming in RGB888 (RGB3) pixel format, acquisition cannot be restarted if <b>Exposure Auto</b> is enabled. The camera must be rebooted.

Table 40: Resolved issues

## Known issues

Alvium ID	Affected models	Description
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.

Table 41: Known issues

## FW 00.06.00.35992

Date of document release: 2021-Aug-13

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c, C-501m/c NIR
Alvium 1800	C-040m/c, C-158m/c, C-240m/c, C-319m/c, C-507m/c, C-508m/c, C-511 m/c, C-811 m/c, C-1236m/c, C-1240m/c, C-1242m/c, C-1620m/c, C-2040m/c, C-2050m/c, C-2460m/c

Table 42: Supported models

## New models

Alvium 1500 C-501m/c NIR, 1800 C-511, C-811, C-1242, C-1620, C-2040

## New features

No features were added.

## Resolved issues

Alvium ID	Affected models	Description
553	1800 C-2460m/c	Calculated frame rates for small ROIs are not exact.

Table 43: Resolved issues

## Known issues

Alvium ID	Affected models	Description
338	1500 C-210m/c, 1500 C-500m/c, 1500 C-501m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
395	All	After <b>Acquisition Stop</b> has been executed on a camera streaming in RGB888 (RGB3) pixel format, acquisition cannot be restarted if <b>Exposure Auto</b> is enabled. The camera must be rebooted.

Table 44: Known issues

## FW 00.04.00.34658

Date of document release: 2021-May-03

## Supported models

Camera family	Model
Alvium 1500	C-120m/c, C-210m/c, C-500m/c
Alvium 1800	C-040m/c, C-158m/c, C-240m/c, C-319m/c, C-507m/c, C-508m/c, C-1236m/c, C-1240m/c, C-2050 m/c, C-2460m/c

Table 45: Supported models

## New models

Alvium 1800 C-2460m/c

## New features

- Exposure Active controls
- Line Configuration for I/O lines
- Line Status for I/O lines

## Resolved issues

Alvium ID	Affected models	Description
387	1500 C-120m/c, 1500 C-210m/c, 1500 C-500m/c, 1800 C-2050m/c	When the ROI is reduced during streaming, the frame rate remains the same. The correct frame rate can be adjusted if streaming is stopped and the pixel format is selected again.

Table 46: Resolved issues

## Known issues

Alvium ID	Affected models	Description
338	1500 C-210m/c, 1500 C-500m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
395	All	After <b>Acquisition Stop</b> has been executed on a camera streaming in RGB888 (RGB3) pixel format, acquisition cannot be restarted if <b>Exposure Auto</b> is enabled. The camera must be rebooted.
553	1800 C-2460m/c	Calculated frame rates for small ROIs are not exact.

Table 47: Known issues

## FW 00.03.00.31919

Date of document release: 2020-Dec-08

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c
Alvium 1800	C-040m/c, C-158m/c, C-240m/c, C-319m/c, C-507m/c, C-508m/c, C-1236m/c, C-1240m/c, C-2050 m/c

Table 48: Supported models

## New models

No models were added.

## New features

- Exposure Auto limits (minimum and maximum values)
- Gain Auto limits (minimum and maximum values)
- Intensity Auto controls (precedence and target value controls)
- Frame rate control
- Sensor timing optimizations increase maximum frame rates for selected models
- Triggering over CSI-2 (Frame Start)
- Updated default values for auto white balance
- Fixed pattern noise correction (FPNC) support for all models, except Alvium 1800 C-2050
- Defect pixel correction (DPC, factory calibrated) for 1800 C-2050m/c models

## Resolved issues

Alvium ID	Affected models	Description
299	1800 C-1236m/c, 1800 C-1240m/c, 1800 C-2050m/c	Fixed issue with <b>Acquisition Stop</b> command.

Table 49: Resolved issues

## Known issues

Alvium ID	Affected models	Description
338	1500 C-210m/c, 1500 C-500m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , no image is transmitted.
387	1500 C-120m/c, 1500 C-210m/c, 1500 C-500m/c, 1800 C-2050m/c	When the ROI is reduced during streaming, the frame rate remains the same. The correct frame rate can be adjusted if streaming is stopped and the pixel format is selected again.
395	All	After <b>Acquisition Stop</b> has been executed on a camera streaming in RGB888 (RGB3) pixel format, acquisition cannot be restarted if <b>Exposure Auto</b> is enabled. The camera must be rebooted.

Table 50: Known issues

## FW 00.02.00.29974

Date of document release: 2020-Jul-23

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c
Alvium 1800	C-040m/c, C-158m/c, C-240m/c, C-319m/c, C-507m/c, C-508m/c, C-1236m/c, C-1240m/c, C-2050 m/c

Table 51: Supported models

## New models

Alvium 1800 C-240m/c, C-508m/c, C-1240m/c

## New features

No features were added.

## Resolved issues

No issues were fixed.

## Known issues

Alvium ID	Affected models	Description
299	1800 C-1236m/c, 1800 C-1240m/c, 1800 C-2050m/c	<b>Acquisition Stop</b> command during sensor readout can stop the camera.
338	1500 C-210m/c, 1500 C-500m/c, 1800 C-1240m/c, 1800 C-2050m/c	If <b>Acquisition Stop</b> is executed shortly after <b>Acquisition Start</b> , the captured frame is discarded.

Table 52: Known issues



## FW 00.01.03.29478

Date of document release: 2020-May-07

### Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c
Alvium 1800	C-040m/c, C-158m/c, C-319m/c, C-507m/c, C-1236m/c, C-2050 m/c

Table 53: Supported models

### New models

Alvium 1800 C-319m/c, C-507m/c, C-1236m/c, C-2050m/c

### New features

Defect pixel correction (DPC, factory calibrated, except for 1800 C-2050m/c models)

### Resolved issues

Alvium ID	Affected models	Description
49	All	Fixed first black image in qv4l2.
79	All	Fixed issues with <b>Offset X</b> for <b>Offset Y</b> .

Table 54: Resolved issues

### Known issues

Alvium ID	Affected models	Description
299	1800 C-1236m/c, 1800 C-1240m/c, 1800 C-2050m/c	<b>Acquisition Stop</b> command during sensor readout can stop the camera.
395	All	After <b>Acquisition Stop</b> has been executed on a camera streaming in RGB888 (RGB3) pixel format, acquisition cannot be restarted if <b>Exposure Auto</b> is enabled. The camera must be must be rebooted.

Table 55: Known issues

## FW 00.01.02.28100

Date of document release: 2019-Dec-03

### Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-210m/c, C-500m/c
Alvium 1800	C-040m/c, C-158m/c

Table 56: Supported models

## New models

Alvium 1500 C-210m/c

Alvium 1800 C-040m/c, C-158m/c

## New features

- Gamma
- Saturation
- ROI: Adjustable width
- Mirror image

## Resolved issues

No issues were fixed.

## Known issues

Alvium ID	Affected models	Description
49	All	When streaming with qv4L2, the first image is black.
79	All	Large values for Offset X for Offset Y may not work properly.

Table 57: Known issues

## FW 00.01.00.26405

Date of document release: 2019-Jul-01

## Supported models

Camera family	Model
Alvium 1500	C-050m/c, C-120m/c, C-500m/c

Table 58: Supported models

## New models

Initial commercial release of Alvium 1500 C-050m/c, C-120m/c, C-500m/c

## Known issues

No issues have been discovered.

## Contact us

### Website, email

**General**

[www.alliedvision.com/en/contact](http://www.alliedvision.com/en/contact)

[info@alliedvision.com](mailto:info@alliedvision.com)

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**Current firmware and release notes**

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

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