VariCam/Cinema Camera

VariCam Pure
4K Camera Recorder
PL Lens  | super35mm 1MOS  | Codex Capture Drive Slot x 2

Uncompressed 4K/120p V-RAW Recording with Compact, Lightweight Package
- A Package of the VariCam 35 camera module and the Codex's “V-RAW 2.0” recorder*
- Super 35 mm 4K MOS sensor.
  - 14+ stops of latitude with “V-Log” gamma.
  - Dual Native ISO (ISO800/ISO5000).
- Uncompressed 4K/120p V-RAW Recording
  - The recorder captures uncompressed V-RAW data to Codex's Capture Drive 2.0 at 4K up to 120 fps.
  - Using Codex's Production Suite, recorded data can be offloaded as a wide range of file formats including V-RAW, ProRes and DNxHR. This ensures wide-ranging support for existing workflows.
- High mobility with compact size of 33 mm shorter than VariCam 35.
- Camera module and recorder module can be operated in separate locations using an extension module.

VariCam 35
4K Camera Recorder
PL Lens  | super35mm 1MOS  | ProRes
expressP2/P2 card Slot x 2  | microP2 card Slot x 2

Super 35 mm 4K MOS Sensor with 4K/120 fps Compatibility in a 4K Cinema Camera.
- Super 35 mm 4K MOS sensor.
  - 14+ stops of latitude with “V-Log” gamma.
  - Dual Native ISO (ISO800/ISO5000).
- Multiple codec recording for 4K/UHD/2K/HD.
- 4K/UHD-VFR recording: 1 fps to 120 fps.
- For 2K/HD recording, Apple ProRes*2 is supported in addition to AVC-ULTRA.
- AVC-Intra 4K/UHD/2K/HD recording.
- Dual codec recording as main (4K/UHD/2K/HD) and sub (2K/HD/Proxy) simultaneously.
- In-camera color grading function.
- Camera module and recorder module can be operated in separate locations using an extension module.

VariCam HS
2/3-type HD Camera Recorder
2/3-type Lens  | 2/3-type 3MOS  | ProRes
expressP2/P2 card Slot x 2  | microP2 card Slot x 2

HD Acquisition System with 2/3-type Depth of Field and Maximum 240 fps Speed for Capturing Decisive Moments.
- 2/3-type 2.2-megapixel 3MOS sensor.
  - 2/3-type bayonet mount for use with conventional HD lens.
  - 14 stops of latitude, “F REC” and “V-Log” gamma.
- Maximum 240 fps VFR recording: 1 fps to 240 fps.
- Multiple codec HD recording.
  - Visually loss-less quality codec AVC-Intra200.
  - Apple ProRes*2 supported.
  - Dual codec recording as main (HD) and sub (HD/Proxy) simultaneously.
- In-camera color grading function.
- Camera module and recorder module can be operated in separate locations using an extension module.

Capture Action
CINEMA
Achieve Your Vision
Uncompressed V-RAW Recording
CINEMA
VariCam
A VC ULTRA
V-RAW
CINEMA
VARICAM

Cinematic VariCam Look in Your Hands

VariCam LT
4K Camera Recorder
Ready for Live CINE LIVE
EF Lens PL Lens (option) super35mm 1MOS ProRes expressP2/P2 card Slot x 1 SD Memory Card Slot x 1

Lightweight, Compact 4K Cinema Camera Offering Many of The Features of VariCam 35.

• Firmware version 8.0 or above supports HLG/Rec. 2020 enabling HDR operation for CINE LIVE.
• Same Super 35 mm 4K MOS sensor as VariCam 35.
  – 14+ stops of latitude with “V-Log” gamma.
  – Dual Native ISO (ISO800/ISO5000).
• A standard EF lens mount*3 and a optional PL mount user changeable mount.
• V-LOOK scene file mode for creating cinematic images without color grading.
• Native 4K/60p shooting and 2K/HD cropped 240p slow motion.
• AVC-Ultra 4K/UHD/2K/HD recording.
• For 2K/HD recording, Apple ProRes*2 is supported in addition to AVC-Ultra.
• Dual codec recording as main (4K/UHD/2K/HD) and sub (proxy) simultaneously.
• Uncompressed RAW output with 4K or 2K cropped.
• In-camera color grading function.
• IR (Infrared) cinematography shooting function.

AU-EVA1
Compact Cinema Camera
Ready for Live EVA-LIVE
EF Lens 5.7K super35mm 1MOS SD Memory Card Slot x 2

Explore Your Undiscovered Creativity With 5.7K Compact Cinema Camera

• The 5.7 K Super 35 mm image sensor achieves high-quality 4K/10 bit 4:2:2 images.
• The wide 14 stops dynamic range, V-Log gamma and wide-color-gamut V-Gamut colorimetry, which are inherited from the VariCam Series, ensure cinema-like pictures.
• Dual native ISO of 800/2500 offers very high sensitivity with low noise.
• Supports High-frame-rate recording of 4K 60 fps/2K 240 fps maximum.
• The IR (infrared ray) cut filter ON/OFF mechanism provides the ability to shoot fantasy-like IR images with Cinematography mode.
• Supports 5.7K RAW output compatible with third party recorders.
• The main unit is lightweight and compact, weighing only 1.2 kg.*5 It is equipped with an EF lens mount.*4 The LCD monitor features a touch-panel function and allows flexible mounting.
• The detachable handle and rotary grip add a new dimension of mobility by enabling the installation of the camera to a drone or gimbal.

* Pictures are the example of the configuration using options.
*1: Customers who have already purchased the VariCam 35 camera module can also connect to the V-RAW 2.0 recorder AU-VCXRAW2. V-RAW 2.0 is manufactured by Codex and sold by Panasonic. Jointly developed with Codex Digital. *2: ProRes is licensed from Apple Inc. Apple ProRes codec from Atomos under license. Atomos is trademark and copyright of Atomos Global Pty. Ltd. *3: Up to 30p of frame rate. *4: Panasonic does not guarantee the compatibility or performance of all EF lenses. For more details, to be updated on the Panasonic website. *5: Main unit only (excluding the handle, grip and LCD monitor).
Super 35 mm Native 4K Sensor
All models in the Cinema VariCam Series are equipped with the super 35 mm sensor. This sensor won The Hollywood Post Alliance Engineering Excellence Award 2015.

Wide Latitude “V-Log” Gamma
All models in the series also offer the dynamic range of 14+ stops on “V-Log” gamma. This wide dynamic range assures accurate image rendering, particularly from the critical shadow to highlight areas. Transition into highlights is remarkable for its highly natural roll-off.

Natural “V-Gamut” Color Space
The color separation filter is optimized to achieve the Cinematic VariCam look. It offers natural color and accurate color linearity. The new “V-Gamut” color space encompasses the entire BT. 2020 color space. “V-Log” with “V-Gamut” has sufficient latitude and color space for HDR. Grading output is available for post production.

Dual Native ISO
The image sensor has two native ISO settings: 800 and 5000. This allows the camera to achieve much higher sensitivity without increased noise before gain processing. It captures images with very low light or natural light, reduces the amount of additional lighting required, and may extend the “Magic Hour.”

In-Camera Color Grading
A built-in LUT box lets you make color decisions on-set with 3rd party applications. Grading information, such as 3D LUT files and CDL files, allows you to provide the same images you create on-set to post-production with easy management.

4K Master and HD Graded Simultaneous Recording
In addition to main recording up to 4K, you can record one more version up to 2K. This enables an ungraded 4K master recording with V-Log, simultaneous with an HD graded recording. You can use the HD graded recording for immediate viewing or off-line editing. Dailies that had been created after shooting can now be produced on-set and with only the camera.

Multi-Codec 4K/UHD/2K/HD Recording
- V-RAW: VariCam Pure supports uncompressed 4K resolution RAW recording with a frame rate of up to 120 fps. VariCam LT can output uncompressed RAW from SDI output terminals.
- AVC-ULTRA: VariCam 35 supports AVC-Intra 4K. It offers high picture quality and a manageable file size.
- Apple ProRes:* ProRes (2K/HD) is the industry standard codec.
* ProRes is licensed from Apple Inc.

Large-Diameter OLED Viewfinder
Newly developed 1080p OLED panel shows very clear & accurate image, no lag, low latency, very sharp, accurate color. Wide field angle with viewfinder magnification of 0.78x and large-diameter 38 mm eyepiece lens offer comfortable viewing with minimum vignetting. Optical zoom adjusts image size to personal preference. This viewfinder assists you to expose properly with the Y-Get (spot meter), waveform, false color and zebra. It is capable of 2x, 3x and 4x expand focus.

Separate Operation with Extension Module
VariCam Pure, VariCam 35 and VariCam HS have a modular design. The camera module and recording module can be positioned at separate locations and connected with the AU-VEXT1G Extension Module. This lets you mount only the camera head to a crane, thus adding flexibility to your camera work.

Remote Control App “VariCam ROP”
The VariCam ROP app for iPad/iPhone is available free of charge from the Apple App Store. It enables wireless remote control of the VariCam Series.
* For wireless LAN connection with the camera, the AJ-WM50 or AJ-WM30 Wireless Module must be purchased separately.

Incredibly Fast Offload — expressP2 x Thunderbolt™ 3
The expressP2 card B series has a data offload speed of 10 Gbps. The AU-XPD3 expressP2 Drive, equipped with Thunderbolt™ 3 interface, brings out the best of the expressP2 card B series.

Single drive performance

| 512 GB | Thunderbolt™ 3 | approx. 7 min*1
| 3 hours | | |

Daisy-chain performance

| 1 TB (128 GB) | Thunderbolt™ 3 | approx. 8 min*1
| 6 hours | | |

*1: The actual data transfer speed and time depend on the system.
* Thunderbolt and the Thunderbolt logo are trademarks of Intel Corporation in the U.S. and/or other countries.
Custom Splash Screen and Owner Information

The camera will have 2 visible and indelible marks of ownership.
- Custom Splash Screen: You can personalize your flash screen with any logo, text, or graphics.
- Owner Information: You can input the name, address, and contact information of the equipment’s owner.

*Change of 1 and 2 requires password if CSS/Owner Info data in camera is password protected.

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<table>
<thead>
<tr>
<th>Module Configuration</th>
<th>VariCam PURE</th>
<th>VariCam 35</th>
<th>VariCam LT</th>
<th>AU-EVA1</th>
<th>VariCam HS</th>
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<tbody>
<tr>
<td>Recording Module: AU-VXRAW2</td>
<td>Recording Module: AU-VXRAW2</td>
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<td>Recording Module: AU-VRECG1</td>
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<td>AU-VCVF2GJ</td>
<td>AU-VCVF2GJ (HD-SDI Input Type)</td>
<td>Supplied LCD</td>
<td>AU-VCVF2GJ</td>
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<td>Extension Module</td>
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<td>AU-VEXT1G</td>
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<td>–</td>
<td>AU-VEXT1G</td>
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<tr>
<td>Lens Mount</td>
<td>PL mount</td>
<td>PL mount</td>
<td>EF mount (exchangeable to optional PL mount)</td>
<td>EF mount</td>
<td>2/3-type B4 mount</td>
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<td>super35 mm, MOS, 8.9 megapixels</td>
<td>super35 mm, MOS, 8.9 megapixels</td>
<td>super35 mm, MOS, 17.25 megapixels</td>
<td>2.2 megapixels, MOS x 3</td>
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<td>14+ stop</td>
<td>14+ stop</td>
<td>14 stop</td>
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<td>expressP2 card, P2 card, microP2 card (sub)</td>
<td>expressP2 card, P2 card, SD Memory Card (proxy)</td>
<td>SD Memory Card</td>
<td>expressP2 card, P2 card, microP2 card (sub)</td>
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<td>4K: 60 fps, 2K: 240 fps</td>
<td>240 fps/200 fps</td>
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<td>✔</td>
<td>–</td>
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</tbody>
</table>

*: It is possible to use it. **: This function will be supported by version upgrade. *1: “EVA ROP App” for iPad or Android tablet.
VariCam Modules, Accessories, Memory Card Drives and Memory Cards

AU-V35C1G 4K Camera Module
AU-V23HS1G 2/3 type HD Camera Module
AU-VREC1G Recording Module
AU-VCXRAW2 V-RAW2.0 Recorder
AU-V35LT1G Memory Card Camera Recorder
AU-VCVF2GJ HD Color View Finder
AU-VCVF20GJ HD Color View Finder
AU-VSHEL2G Shoulder Mount Module
AU-VSHEL1G Shoulder Mount Module
AU-VCBL20G Extension Cable (20 m)
AU-VCBL05G Extension Cable (5 m)
AU-VMPL1G PL Mount
AU-VGRP1G Grip Module
AU-VEXT1G Extension Module
AU-VCVF20GJ HD Color View Finder

AJ-MC900G Microphone
AG-MC200G XLR Microphone
AJ-MH800G Microphone Holder

AK-HRP200G Remotes Operation Panel (ROP)
AK-HRP1000 Remote Operation Panel (ROP)
AK-HRP1005GJ Memory Card Drive expressP2 card drive
AK-HRP1005GJ Memory Card Drive expressP2 card drive

AJ-WM50 Wireless Module*5
AJ-WM30 Wireless Module*5

Connection Confirmed Wireless Module*5 (including third-party products)

*1: The AU-VCXRAW2 is manufactured by Codex and sold by Panasonic. Jointly developed with Codex Digital.
*2: Requires the optional AJ-P2AD1G Memory Card Adapter to use the microP2 card.
*3: Connection of the AU-XPD1 requires two USB cables. A power supply is connected with USB 3.0 port of PC or an AC adaptor.
*4: Exchanging AU-XPD1 hardware, free of charge, might be necessary when expressP2 card B series used on AU-XPD1. For details please visit Panasonic website (https://pro-av.panasonic.net/en/sales_or/p2/server/wireless_module.html).
*5: For details please visit Panasonic website (https://pro-av.panasonic.net/en/sales_or/p2/server/wireless_module.html).
*6: It is necessary to upgrade the recorder’s firmware. For details please visit Panasonic website (https://pro-av.panasonic.net/). “Notes when using expressP2 card C series”
**Optional Accessories for AU-EVA1**

<table>
<thead>
<tr>
<th>Memory Card</th>
<th>AU-XP0512CG (512 GB)</th>
<th>AU-XP0256CG (256 GB)</th>
<th>AU-XP0512BG (512 GB)</th>
<th>AU-XP0256BG (256 GB)</th>
<th>AJ-P2E060FG</th>
<th>AJ-P2E030FG</th>
<th>AJ-P2M064BG (64 GB)</th>
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<tbody>
<tr>
<td></td>
<td>expressP2 card C series*6</td>
<td>Memory Card expressP2 card B series*4</td>
<td>Memory Card P2card F series</td>
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<tr>
<td>SX Memory Card</td>
<td>AG-VBR118G</td>
<td>AG-VBR89G</td>
<td>AG-VBR59</td>
<td>VW-VBD58 Battery Pack</td>
<td>(11,800 mAh)</td>
<td>(8,850 mAh)</td>
<td>(5,900 mAh)</td>
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<td>AG-VBR59</td>
<td>VW-VBD58</td>
<td></td>
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</tbody>
</table>

- **SDXC/SDHC/SD Card**

- **Wireless Module**
  - AJ-WM50
  - AJ-WM30

- **Memory Card**
  - expressP2 card (C series) AU-XP0512CG AU-XP0256CG
  - expressP2 card (B series) AU-XP0512BG AU-XP0256BG
  - P2 card (F series) AJ-P2E060FG AJ-P2E030FG
  - microP2 card (B series) AJ-P2M064BG

- **Battery Pack**
  - AG-BRDL50
  - AG-B23

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<table>
<thead>
<tr>
<th>Optional Accessories</th>
<th>VariCam Pure</th>
<th>VariCam 35</th>
<th>VariCam LT</th>
<th>AU-EVA1</th>
<th>VariCam HS</th>
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<tbody>
<tr>
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<td>PL Mount</td>
<td>AU-VML1G</td>
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<td>AU-XPD3 AU-XPD1</td>
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<td>✓</td>
<td>✓</td>
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</tbody>
</table>

- ✓: It is possible to use it.
- *1: Not available in some areas.
- *2: 2K/HD only.

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* As of August, 2019

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**Press Release**

- **Coming soon**
- * Replacement of B series due to manufacturing change.

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**It is possible to use it.**
4K Work Flow Partners

4K Workflow Partners are committed to support the VariCam 4K workflow, including AVC-Intra4K, V-LUT, V-RAW, and/or In-Camera Color Grading.

### In Camera Grading
- Colorfront: On-Set Live! RC6 b19262
- FilmLight: Prelight v5.0
- In2Core: Qtake v1.3
- Pomfort: Live Grade PRO v2.2
- WOWOW: Wonder Look Pro v3.5.2

### Offloading
- Codex: Production Suite
- Imagine Products: ShotPutPro
- Pomfort: SilverStack
- YoYotta: YoYottaID

### RAW Recorder
- Atomos: Shogun Inferno, Shogun Flame, Sumo19
- Codex: V-RAW 2.0 recorder
- Convergent Design: Odyssey 7Q/ 7Q+

### Editing/Grading
- Adobe: Premiere Pro CC
- Apple: Final Cut Pro X
- Assimilate: Final Cut Pro X
- Autodesk: Flame family, Smoke
- Avid: Media Composer
- Blackmagic Design: DaVinci Resolve, DaVinci Resolve Studio
- Colorfront: On-Set Dailies, Express Dailies, Transkoder
- Digital Vision: NuCoda
- FilmLight: Baselight, Daylight
- GrassValley: EDIUS Pro,
- Quantel Rio, Rio Assist

### AVC-Ultra / RAW Import Plug-in
- Calibrated Software: AVC-Intra LT Import for Adobe
- Drastic Technology: Media Reactor

Products and versions are informed by Partners as of June 2019.
VariCam PURE

General Specification
(Combination of AU-V35C1G and AU-VCXRAW2)

- **Power:** DC IN 24 V
- **Power Consumption:** 105 W
- **Operating Temperature:** 0°C to 40°C (32°F to 104°F)
- **Operating Humidity:** 10% to 85% (Relative humidity)
- **Weight:** Approx. 5.15 kg (11.35 lb)
  - (V35C1: 2.7 kg (5.95 lb)/VRAW2: 0.2 4.5 kg (5.40 lb)
  - *5.45 kg (12.02 lb) including a cheese plate
- **Dimensions:** 180.2 mm (W) x 236.3 mm (H) x 314 mm (H)
  - (7-3/32 inches x 9-19/64 inches x 12-23/64 inches)
  - excluding protrusion and accessories

**Camera**
- **Pickup Device:** Super 35 mm, MOS sensor
- **Number of Pixels:** Total pixels: Approx. 10.3 million pixels
  - Effective Pixels: Approx. 8.9 million pixels
- **Lens Mount:** PL mount
- **Optical Filter:** ND filter: 1: CLEAR, 2: 0.6 ND, S: 1.2 ND, 4: 1.8 ND
- **Latitude:** 14+ Stops
- **ISO Setting:** Native: ISO 800, 5000
  - 800 Base: 200 to 4000
  - 5000 Base: 1250 to 12800
- **Shutter Speed:** [deg] mode: 1.0 deg to 358 deg (0.5 deg step)
  - [sec] mode: 1/24 sec. to 1/250 sec. (for 24P)

**V-RAW2.0 Recorder (AU-VCXRAW2)**

When used with AU-V35C1G

**Memory Card Recorder**
- **Recording Media:** CODEX Capture Drive
- **Recording Resolution:**
  - 4096 x 2160 (4K), 3840 x 2160 (UHD)
- **Recording Frame Rate:**
  - Maximum 120 fps/100 fps
- **System Frequency:** 59.94p, 50p, 29.97p, 25p, 24p, 23.938p
- **Recording Format:** V-RAW: 4K 12 bit/4K 10 bit
  - UHD 12 bit/UHD 10 bit
- **Recording Video Signal:**
  - 4096 x 2160/ 59.94p, 50p, 29.97p, 25p, 24p, 23.938p
  - 3840 x 2160/ 59.94p, 50p, 29.97p, 25p, 23.938p
- **Recording Time:**
  - with 2 TB Capture Drive
    - 4K 12 bit (23.96 fps): Approx. 100 min.
    - 4K 10 bit (23.96 fps): Approx. 112 min.
    - 4K 10 bit (120 fps): Approx. 22 min.
    - UHD 12 bit (23.96 fps): Approx. 106 min.
    - UHD 10 bit (23.96 fps): Approx. 119 min.
    - UHD 10 bit (120 fps): Approx. 22 min.

**Digital Video**
- **Quantizing:** 12 bit/10 bit
- **Video Data Process:** Uncompressed RAW

**Digital Audio**
- **Recording Audio Signal:** 48 kHz/24 bit, 2 CH
- **Headroom:** 18 dB/20 dB MENU switching

**Audio Input/Output**
- **INPUT 1/2:** XLR x 1, 5-pin
- **PHONES:** Stereo mini jack
- **Speaker:** 20 mm diameter, round x 1

**Other Input/Output**

| GENLOCK IN | HD (1.5 G)/3G-SDI, 0.8 V [p-p], 75 Ω |
| TC IN/OUT | BNC x 1 (Input/Output switching)
  - IN: 0.5 V [p-p] ~ 8 V [p-p], 10 kΩ
  - OUT: 2.0 V [p-p] ± 0.5 V [p-p], low impedance |
| DC IN | 24 V (10.5 V ~ 34 V) 2-pin Fisher |
| DC OUT/RS | 24 V ± 3 |
| DC OUT | 12 V x 1 |
| LENS | 12-pin |
| LAN | 100BASE-TX/10BASE-T LEMO |
| USB 2.0 (HOST) | Type A connector, 4-pin |
| CONTROL PANEL | 20-pin, control panel contact terminals |
| SD Card Slot | x1 for Version Up |
| | 3D LUT/ CDL file Upload and Save Set Up File Upload and Save |

**Control Panel**
- **Control Panel:** LCD 3.5-type QHD color monitor, approx. 1.56 million dots

**Electronic HD Color View Finder (AU-VCFV2GJ)**
- **Display Panel:** 0.7-type OLED (Organic Light Emitting Diode) display
- **Input Video Signal:** 1080/59.94p, 1080/50p, 1080/60p
- **Connector:** LEMO 14-pin

**Offload Formats From CODEX Production Suite**

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<th>Recording Mode</th>
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<td>DNXHR HQ</td>
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</tr>
<tr>
<td>DNXHR HQ</td>
<td>4096 x 2160, 10 bit</td>
</tr>
</tbody>
</table>
# VariCam/Cinema Camera Specifications

## VariCam 35
### General Specification
(Combination of AU-V35C1G and AU-VREC1G)
- **Power:** DC 12 V (11.0 V – 17.0 V)
- **Power Consumption:** 99 W (With all optional accessories connected and maximum power supplied from each output terminal)
- **Operating Temperature:** 0°C to 40°C (32°F to 104°F)
- **Operating Humidity:** 10 % to 85 % (Relative humidity)
- **Storage Temperature:** -20°C to 60°C (4°F to 140°F)
- **Weight:** Approx. 5.0 kg (Body only)
- **Dimensions:** 179 mm (W) x 230.5 mm (H) x 347 mm (D) (7-1/16 inches x 9-1/16 inches x 13-21/32 inches) (Body only, excluding protrusion)

### Camera Module (AU-V35C1G)
- **Pickup Device:** super 35 mm MOS 8.9 megapixels
- **Number of Pixels:** Total pixels: Approx. 10.3 million pixels Effective Pixels: Approx. 8.9 million pixels
- **Lens Mount:** 35 mm PL mount
- **Optical Filter:** ND filter: 1; CLEAR: 2; 0.6 ND: 3; 1.2 ND: 4; 1.8 ND
- **EL Settings:** Native ISO: 800, 5000 800 Base: 200 to 4000 5000 Base: 1250 to 12800
- **Shutter Speed:** [deg] mode: 1.0 deg to 358 deg (0.5 deg step) [sec] mode: 1/24 sec. to 1/250 sec. (When 24p mode)

### Recording Module (AU-VREC1G)
When used with AU-V35C1G
- **Memory Card Recorder**
- **Recording Media:** expressP2 card, P2 card, microP2 card
- **Recording Resolution:** 4096 x 2160, 3840 x 2160, 2048 x 1080, 1920 x 1080
- **Recording Frame Rate:** Maximum 4K/UHD 100p/120p, HD 100p/120p
- **System Frequency:** 59.94p, 50p, 29.97p, 25p, 24p, 23.98p
- **Recording Format:** AVC-Intra4K444, AVC-Intra4K422,
  (Main Recorder) AVC-Intra4K-LT, AVC-Intra2K444, AVC-Intra2K422, AVC-Intra444,
  AVC-Intra200, AVC-Intra222, AVC-Intra100, ProRes 4444 XQ, ProRes 4444, ProRes 422 HQ, ProRes 422, ProRes 222 LT
- **Recording Format (Sub Recorder):** AVC-Intra2K422, AVC-Intra422.
  AVC-Intra100, AVC-LongG 50, AVC-LongG 25
- **Recording Time (Main Codec):** When expressP2 card 512 GB is used* AVC-Intra4K444 (24p): Approx. 90 min. AVC-Intra4K422 (VFR ON, 50 fps/83 fps): Approx. 72 min. AVC-Intra4K422 (VFR OFF, 24p): Approx. 180 min. AVC-Intra4K-LT (VFR ON, 100 fps/120 fps): Approx. 64 min. AVC-Intra100 (VFR ON, 100 fps/120 fps): Approx. 128 min. ProRes 422 HQ (VFR ON, 60 fps): Approx. 120 min.

### Digital Audio
- **Recording Audio Signal:** 48 kHz/24 bit, 4 ch
- **Headroom:** 18 dB/20 dB menu switchable
- **Proxy**
  - **File Format:** MOV
  - **Video Compression Format:** H.264/AVC High Profile
  - **Audio Compression Format:** LPCM
  - **Recording Time:** Approx. 25 min. (1 GB)*

### Video Input/Output
- **SDI OUT:** HD (1.5 G) /3G-SDI, 0.8 V [p-p], 75 Ω (1 set, 4 pieces)
- **MON OUT1:** HD (1.5 G)/3G-SDI, 0.8 V [p-p], 75 Ω
- **MON OUT2:** HD (1.5 G)/3G-SDI, 0.8 V [p-p], 75 Ω
- **VF SDI:** HD (1.5 G)/3G-SDI, 0.8 V [p-p], 75 Ω

### Audio Input/Output
- **AUDIO IN (CH1/CH2): XLR x 2, 3-pin, LINE/MIC/MIC+48 V/AES switchable
- **MIC IN:** XLR x 1, 5-pin
- **PHONES:** Stereo mini jack
- **Speaker:** 20 mm diameter, round x 1

### Other Input/Output
- **GENLOCK IN:** HD (1.5 G) /3G-SDI, 0.8 V [p-p], 75 Ω
- **TC IN/OUT:** BNC x 1, IN/OUT switch selection IN: 0.5 V [p-p] to 8 V [p-p], 10 kΩ OUT: 2.0 V [p-p] ± 0.5 V [p-p], Low impedance
- **DC IN:** XLR 4-pin, DC 12 V (DC 11.0 V – 17.0 V)
- **DC OUT/RS:** 4-pin, DC 12 V (DC 11.0 V – 17.0 V), maximum output current 1.0 A
- **DC OUT:** 2-pin, DC12 V (DC 11.0 V – 17.0 V), maximum output current 1.0 A
- **LENS:** 12-pin x 1, 4-pin x 2
- **VF:** 14-pin
- **LAN:** 100BASE-TX/10BASE-T
- **USB 2.0 (DEVICE):** Type B connector, 4-pin
- **USB 2.0 (HOST):** Type A connector, 4-pin
- **EXT:** 50-pin (for external recording only)*

### Control Panel
- **Display Panel:** LCD: 3.5-type QHD color monitor
- Approx. 1.56 million dots

### Extension Module (AU-VEXT1G)
- **Power:** DC 12 V (11.0 V – 17.0 V)
- **Power Consumption:** 33 W (Body only)
- **Power Consumption:** 63 W (With all optional accessories connected and maximum power supplied from each output terminal)
- **Operating Temperature:** 0°C to 40°C (32°F to 104°F)
- **Operating Humidity:** 10 % to 85 % (Relative humidity)
- **Storage Temperature:** -20°C to 60°C (4°F to 140°F)
- **Weight:** Camera Extension Module: Approx. 0.95 kg Recording Extension Module: Approx. 0.65 kg
- **Dimensions:** Camera Extension Module: 121 mm (W) x 143 mm (H) x 73 mm (D) (4-13/16 inches x 5-11/16 inches x 2-7/8 inches) Recording Extension Module: 106 mm (W) x 143 mm (H) x 61 mm (D) (4-3/16 inches x 5-11/16 inches x 2-7/16 inches)

### Input/Output
- **DC IN:** XLR 4-pin, DC 12 V (DC 11.0 V – 17.0 V)
- **DC OUT:** 2-pin, DC 12 V (DC 11.0 V – 17.0 V), maximum output current 1.0 A
- **EXT:** 48-pin

### Electronic HD Color View Finder (AU-VCVF2GJ)
- **Display Panel:** 0.7-type OLED (Organic Light Emitting Diode) display
- **Input Video Signal:** 1080/59.94p, 1080/50p, 1080/60p
- **Connector:** LEMO 14-pin

*These are reference values for continuous recording. The recording time may differ depending on the scene or the number of clips.*
VariCam LT

General Specification

Power: DC 12 V (11.0 V – 17.0 V)
Power Consumption: 47 W (with body only)
77 W (with all optional accessories connected and maximum power supplied from each output terminal)

Operating Temperature: 0°C to 40°C (32°F to 104°F)
Operating Humidity: 10% to 85% (Relative humidity)
Storage Temperature: –20°C to 60°C (–4°F to 140°F)

Weight: Approx. 2.7 kg (6.0 lb), excluding handle and accessories
Approx. 3.0 kg (6.6 lb), including handle, excluding accessories

Dimensions: 184.0 mm (W) x 230.5 mm (H) x 247.0 mm (D)
(7-1/4 inches x 9-3/32 inches x 9-3/4 inches)
Body only, excluding protrusion and accessories

Ensure that the current taken from the DC OUT terminal, LENS/GRIP terminal, DC OUT/RS terminal and USB HOST terminal does not exceed 30 W.

Camera Unit

Pickup Device: Super 35 mm, MOS sensor
Number of Pixels: Total pixels: Approx. 10.3 megapixels
Effective pixels: Approx. 8.9 megapixels
Lens Mount: EF mount
Optical Filter: ND filter: 1: CLEAR, 2: 0.6 ND, 3: 1.2 ND, 4: 1.8 ND

Gain setting: [ISO] mode:
Native ISO: 800, 5000
800 Base: 200 to 4000
5000 Base: 1250 to 12800
[dB] mode: –12 dB to 14 dB (2 dB step)

Shutter Speed: [deg] mode: 1.0 deg to 358 deg (0.1 deg step)
[sec] mode: 1/2 sec to 1/250 sec. (for 24p)

Sensitivity: [GAIN MODE]= [NORMAL], [GAMMA]= [VIDEO45]
F7 (2000 lx, 3200 K, 89.9 % reflection, 1080/59.94p)
F8 (2000 lx, 3200 K, 89.9 % reflection, 1080/50p)

Memory Card Recorder

Recording Media: Main slot x 1: expressP2 card, P2 card
Sub slot x 1: SD memory card

Recording Resolution:
4096 x 2160 (4K), 3840 x 2160 (UHD), 2048 x 1080 (2K), 1920 x 1080 (HD)

Recording Frame Rate:
4K/UHD: Maximum 60 fps or 50 fps
2K/HD Crop: Maximum 240 fps or 200 fps

System Frequency:
59.94p, 50p, 29.97p, 25p, 24p, 23.98p, 59.94i, 50i

Recording Format:
AVC-Intra4K24, AVC-Intra4K-LT,
AVC-Intra2K444, AVC-Intra2K422,
AVC-Intra2K-LT, AVC-Intra444,
AVC-Intra-LT, AVC-Intra100,
ProRes 4444 XQ, ProRes 4444
ProRes 422 HQ, ProRes 422, ProRes 422 LT

Recording Format (Sub Recorder):
AVC-LongG6 Recording

Video Signal:
4096 x 2160/23.98p, 59.94p, 50p, 29.97p, 25p, 24p, 23.98p
3840 x 2160/23.98p
59.94p, 50p, 29.97p, 25p, 24p, 23.98p
2048 x 1080/23.98p
59.94p, 50p, 29.97p, 25p, 24p, 23.98p
1920 x 1080/23.98p
59.94p, 50p, 29.97p, 25p, 23.98p, 59.94i, 50i

Recording Time*: (Main Codec)
When using expressP2 card 512 GB
and when [FREQUENCY]= [23.98p]
AVC-Intra4K24, 23.98 fps: Approx. 180 min.
AVC-Intra4K22, VFR ON, 30 fps: Approx. 146 min.
AVC-Intra4K-LT, VFR ON, 60 fps: Approx. 128 min.
AVC-Intra4K22, VFR ON, 60 fps: Approx. 260 min.
ProRes 422 HQ VFR ON, 60 fps: Approx. 134 min.

Recording Time*: (Sub Codec)
AVC-LongG6:
Approx. 655 min.

Digital Video

Quantizing: AVC-Intra4K444, AVC-Intra444: 12 bit
Others: 10 bit

Video Compression Format:
AVC-Intra4K24, AVC-Intra4K-LT,
AVC-Intra2K444, AVC-Intra2K422,
AVC-Intra2K-LT, AVC-Intra444, AVC-Intra422,
AVC-Intra-LT, AVC-Intra100,
MPEG-4 AVC/H.264 intra Profile
ProRes 422 HQ, ProRes 4444;
Apple ProRes*6

Digital Audio

Recording Audio Signal: 48 kHz/24 bit, 4 ch
Headroom: 18 dB/20 dB switchable menu

AVC Proxy

File Format: MOV
Video Compression Format:
MPEG-4 AVC/H.264 Intra Profile
Audio Compression Format: AAC

Recording Time*: Approx. 655 min.
When using a 64 GB SDXC memory card

Video Input/Output

SDI OUT1/ SDI OUT2:
HD (1.5 G) / 3G-SDI, 0.8 V [p-p], 75 Ω
VF SDI:
HD (1.5 G) / 3G-SDI, 0.8 V [p-p], 75 Ω

Audio Input/Output

INPUT 1/2: XLR x 1, 5-pin
INPUT 3/ INPUT 4: XLR x 2, 3-pin, Supports menu switching to select LINE/MIC or enable/disable the power supply of the microphone.

PHONES: Stereo mini jack
Speaker: 20 mm diameter, round x 1

Other Input/Output

GENLOCK IN: HD (1.5 G) / 3G-SDI, 0.8 V [p-p], 75 Ω
TC IN/OUT: BNC x 1, Input/Output switching
Input: 0.5 V [p-p] to 8 V [p-p], 0 kΩ
Output: 2.0 V [p-p] ± 0.5 V [p-p], low impedance

DC IN: XLR x 1, 4-pin, DC 12 V (DC 11.0 V – 17.0 V), maximum output current 1.0 A

DC OUT: 2-pin, DC12 V (DC 11.0 V – 17.0 V), maximum output current 1.0 A

LENS/GRIP: 12-pin
LAN: 100BASE-TX/10BASE-T
USB DEVICE: USB 2.0 devices: Type B connector, 4-pin
USB HOST: USB 2.0 host: Type A connector, 4-pin

CONTROL PANEL: 20-pin, control panel contact terminals
EF Mounting Contact: 8-pin

Control Panel

Display Panel: LCD, 3.5-type QHD color monitor, approx. 1.56 million dots

Electronic HD Color View Finder (AU-VCFV20GJ)
Display Panel: 0.7-type OLED (Organic Light Emitting Diode) display
Input Video Signal:
1080/59.94p, 1080/50i, 1080/60p, 1080/23.98PbS, 1080/24PbS, 1080/25PbS, 1080/29.97PbS, 1080/59.94i, 1080/50i

Connector: SDI, DC IN

*1: Figures are for continuous recording as one clips. Depending on the number or clips, the overall recording time may be shorter than the above.

*2: ProRes is licensed from Apple Inc. Apple ProRes codec is under license from Atomos. Atomos is a trademark and copyright of Atomos Global Pty. Ltd.

*3: Reference value for continuous recording. The recording the may differ depending on the scene or the number of clips.
**VariCam/Cinema Camera Specifications**

### AU-EVA1

#### General Specification

- **Power:**
  - DC 7.28 V (battery operation)
  - DC 12 V (AC adapter operation)

- **Power Consumption:** 19 W (when LCD monitor is used)

- **Operating Temperature:** 0 °C to 40 °C (32°F to 104°F)

- **Operating Humidity:** 10% to 80% (relative humidity)

- **Storage Temperature:** −20 °C to 60 °C (−4°F to 140°F)

- **Weight:**
  - Body: Approx. 1.2 kg (2.65 lb) (excluding accessories)
  - Shooting: Approx. 2.05 kg (4.52 lb) (with accessories)

- **Dimensions:** 135 mm (W) x 133 mm (H) x 170 mm (D) (excluding protrusions and accessories) (5-5/16 inches x 5-1/4 inches x 6-11/16 inches)

#### Camera Unit

- **Image Sensor:** Super 35 mm, MOS sensor

- **Number of Pixels:**
  - Total pixels: Approx. 20.49 megapixels, 6340 (H) x 3232 (V)
  - Effective pixels: Approx. 17.25 megapixels, 5720 (H) x 3016 (V)

- **Sensor Area and Max Frame Rate:**
  - S35: 4K/UHD 60 fps/50 fps
  - 2K/HD 120 fps/100 fps
  - 4/3-type: 2K/HD 240 fps/200 fps

- **Latitude:** 14 stop

- **Log:** V-Log

- **Gamma:** eV-Look Gamma (2 types)
  - Video Gamma
  - Hybrid Log Gamma (HLG)

- **Gamut:** V-Gamut (V-Log)

- **EI Settings:** [ISO] mode: NATIVE ISO: 800, 2500
  - 800: Base: 200 to 2000
  - 2500: Base: 1000 to 25600
  - [dB] mode: (Normal) −12 dB to 8 dB

- **Shutter Speed:**
  - [deg] mode: 3.0 deg to 357.0 deg (0.5 deg step)
  - [sec] mode: 1/24, 1/240 sec to 1/8000 sec

- **Color Temp:** ATW, AWB, 2000 K to 15000 K ±10.0 GMg

- **Lens Mount:** EF mount

- **Image Stabilization:** Electric Image Stabilization (EIS)

- **Auto Focus:**
  - One push auto focus

- **ND Filter:**
  - CLEAR: 0.6 ND, 1.2 ND, 1.8 ND, Electrical driven
  - Electrical ND

- **IR Cut Filter:** USER assignable IR shooting (filter ON/OFF)

#### Memory Card Recorder

- **Recording Media:** SDXC memory card (32 GB to 128 GB), SDHC memory card (4 GB to 32 GB)

- **UHS-I/UHS-II UHS Speed Class3 is supported, Video Speed Class V90 is supported

- **Recording System Frequency:** 59.94p, 50p, 29.97p, 25p, 24p, 23.98p

- **Recording Format:** Please see page 14 for the Recording Format and Recording Time table

- **2 slot Functions:** Simul Rec, Relay Rec

- **Other Rec Functions:** Pre Rec, Interval Rec

#### Digital Video

- **Quantizing:** MOV: 4:2:2 10 bit/4:2:0 10 bit (HEVC)/4:2:0 8 bit

- **AVCHD:** 4:2:0 8 bit

- **Video Compression Format:**
  - H.264/MPEG-4 AVC High Profile
  - H.265/MPEG-H HEVC Main 10 High Profile

#### Digital Audio

- **Recording Audio Format:**
  - MOV: 48 kHz/24 bit, 2 CH, Linear PCM
  - AVCHD: 48 kHz/16 bit, 2 CH, Dolby Audio™

- **Headroom:** 18 dB/20 dB (menu switchable)

#### Video Output

- **SDI OUT:**
  - BNC x 1, SDI REC REMOTE is supported
  - 0.8 V [p-p], 75 Ω, 4K (8G), HD (3G/1.5G)

- **Output format (4:2:2 10 bit):**
  - 4096 x 2160: 29.97p, 25p, 24p, 23.98p
  - 3840 x 2160: 29.97p, 25p, 24p, 23.98p
  - 1920 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 29.97PsF, 25p, 25PsF, 24p, 24PsF, 23.98p, 23.98PsF
  - 1280 x 720p: 59.94p, 50p

- **RAW output format (10 bit):**
  - 5760 x 3072: 29.97p, 25p, 24p, 23.98p

- **HDMI:**
  - HDMI x 1, TypeA
  - HDMI REC REMOTE is supported
  - Viera Link is NOT supported

- **Output format (4:2:2 10 bit):**
  - 4096 x 2160: 59.94p, 50p, 29.97p, 25p, 24p, 23.98p
  - 3840 x 2160: 59.94p, 50p, 29.97p, 25p, 24p, 23.98p
  - 1920 x 1080: 59.94p, 50p, 59.94i, 50i, 29.97p, 25p, 24p, 23.98p
  - 1280 x 720: 59.94p, 50p
  - 720 x 576: 50p

- **Output format (4:2:0 8 bit):**
  - 4096 x 2160: 59.94p, 50p • 3840 x 2160: 59.94p, 50p

#### Audio Input/Output

- **Internal Mic:** Stereo microphone

- **INPUT1/2:**
  - XLR (3-pin) x 2 (INPUT1/2), input high impedance, LINE/MIC/MIC +48 V (menu switchable)

- **MIC:** –40 dBu/−50 dBu/−60 dBu (menu switchable)

- **LINE:** +4 dBu/0 dBu (menu switchable)

- **SDI OUT:**
  - Linear PCM 2 CH

- **HDMI:**
  - Linear PCM 2 CH

- **PHONES:**
  - 3.5 mm stereo mini jack x 1

- **Speaker:**
  - 20 mm diameter, round x 1

#### Other Input/Output

- **TC IN/OUT:**
  - BNC x1 for IN/OUT (menu switchable)
  - IN: 1.0 V [p-p] to 4.0 V [p-p], 10 kΩ
  - OUT: 2.0 V [p-p] ±0.5 V [p-p], low impedance

- **LCD:**
  - 40-pin (for connecting LCD monitor)

- **REMOTE:**
  - 2.5 mm Super Mini Jack

- **USB 2.0 (HOST):**
  - Type-A, 4-pin for Wireless Module (AJ-WM50)

- **EF Mounting Contact:** 8-pin

- **DC IN 12 V:**
  - DC 12 V EIAJ type 4

#### LCD Monitor

- **Size:** 3.5-type LCD monitor (approx. 1,150,000 dots)
  - Touch panel (MENU control, Shooting assist functions)

- **Switches:** MIRROR (OFF, B/T, ROTATE)

#### Hand Grip

- **Mounting Mechanism:**
  - One touch rotatable/Detachable

- **Switches:**
  - REC, MENU, MENU/IRIS multi-dial
  - User switch x 2

#### Included Accessories

- **Accessories:**
  - Battery (5900 mAh), Battery charger, AC adapter, AC cable, Shoulder strap, Microphone holder, Microphone holder adapter, LCD monitor (with hood and mounting attachment), Handle, Grip, Grip belt, Mount cap
## Recording Format and Recording Time

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<td></td>
<td>422LongGOP 150M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>150 Mbps (VBR)</td>
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<td>HEVC LongGOP 200M</td>
<td>59.94p, 50p</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>200 Mbps (VBR)</td>
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<td></td>
<td>420LongGOP 100M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>150 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td>3840 x 2160 (UHD)</td>
<td>422ALL-I 400M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>400 Mbps (VBR)</td>
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<td></td>
<td></td>
<td>422LongGOP 150M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>150 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>HEVC LongGOP 200M</td>
<td>59.94p, 50p</td>
<td>4:2:0</td>
<td>8 bit</td>
<td>200 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td>2048 x 1080 (2K)</td>
<td>422ALL-I 100M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>422LongGOP 100M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>422LongGOP 50M</td>
<td>29.97p, 24p, 25p, 23.98p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>50 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td>1920 x 1080 (FHD)</td>
<td>422ALL-I 100M</td>
<td>29.97p, 25p, 23.98p, 59.94i, 50i</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>422LongGOP 100M</td>
<td>59.94p, 50p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>50 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td>1280 x 720 (HD)</td>
<td>422ALL-I 100M</td>
<td>29.97p, 25p, 23.98p, 59.94i, 50i</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>100 Mbps (VBR)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>422LongGOP 100M</td>
<td>59.94p, 50p</td>
<td>4:2:2</td>
<td>10 bit</td>
<td>50 Mbps (VBR)</td>
</tr>
</tbody>
</table>

### AVCHD

| 1920 x 1080 (FHD) | AVCHD PS | 59.94p, 50p | 4:2:0 | 8 bit | 25 Mbps (VBR) | Approx. 11 hours |
|                   | AVCHD PH | 23.98p, 59.94i, 50i | 4:2:0 | 8 bit | 21 Mbps (VBR) | Approx. 12 hours 30 min. |
|                   | AVCHD HA | 59.94i, 50i | 4:2:0 | 8 bit | 17 Mbps (VBR) | Approx. 17 hours |

### AVCHD SDHC/SDXC

**Bit Rate or Recording Function**

<table>
<thead>
<tr>
<th>Format</th>
<th>Memory Card Type</th>
<th>Speed Class</th>
</tr>
</thead>
<tbody>
<tr>
<td>MOV</td>
<td>SDXC</td>
<td>Video Speed Class V60 or faster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Speed Class V30, UHS Speed Class 3 or faster</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Video Speed Class V10, UHS Speed Class 1, Speed Class 10 or faster</td>
</tr>
</tbody>
</table>

**Available Memory Card**

- **Format**: MOV
- **Memory Card Type**: SDXC
- **Bit Rate or Recording Function**: 400 Mbps, 2K/FHD VFR Mode* (ALL-I Codec), 200 Mbps, 150 Mbps, 100 Mbps, 50 Mbps, 2K/FHD VFR Mode* (LongG Codec)
- **Speed Class**: Video Speed Class V60 or faster, Video Speed Class V30, UHS Speed Class 3 or faster, Video Speed Class V10, UHS Speed Class 1, Speed Class 10 or faster

**Available Battery Pack**

- **Battery**: AG-VBR59 (Bundled)
  - **Voltage and Capacity**: 7.2V, 5900 mAh/43 Wh
  - **Charge time**: Approx. 3 hours 20 min.
  - **Continuous shooting time**: Approx. 2 hours 50 min.

- **Battery**: AG-VBR89G
  - **Voltage and Capacity**: 7.2V, 8850 mAh/64 Wh
  - **Charge time**: Approx. 4 hours
  - **Continuous shooting time**: Approx. 4 hours 15 min.

- **Battery**: AG-VBR118G
  - **Voltage and Capacity**: 7.2V, 11800 mAh/86 Wh
  - **Charge time**: Approx. 4 hours 40 min.
  - **Continuous shooting time**: Approx. 5 hours 40 min.

- **Battery**: VW-VBD58
  - **Voltage and Capacity**: 7.2V, 5800 mAh/42 Wh
  - **Charge time**: Approx. 5 hours 20 min.
  - **Continuous shooting time**: Approx. 2 hours 40 min.

---

*SDXC memory card is required for MOV recording.

*VFR: Variable Frame Rate

*1: When using bundled battery charger. *2: “Continuous shooting time” is when you use this machine in the following condition [Menu setting is factory preset, Have LCD monitor and grip attached, No cable is connected to outputs]. Under other conditions, continuous shootable time becomes shorter.
VariCam HS

General Specification
(Combination of AU-V23HS1G and AU-VREC1G)

Power: DC 12 V (11.0 V – 17.0 V)

Power Consumption: 90 W (With all optional accessories connected and maximum power supplied from each output terminal)

Operating Temperature: 0°C to 40°C (32°F to 104°F)

Operating Humidity: 10% to 85% (Relative humidity)

Storage Temperature: -20°C to 60°C (–4°F to 140°F)

Weight: Approx. 4.5 kg (Body only)

Dimensions: 179 mm (W) x 230.5 mm (H) x 347 mm (D)

(7-1/16 inches x 9-1/16 inches x 13-21/32 inches)

(Body only, excluding protrusion)

Camera Module (AU-V23HS1G)

Pickup Device: 2/3-type 2.2 megapixels, MOS x 3

Lens Mount: 2/3-type bayonet

Optical filter: CC filter A: 3200 K, B: 4300 K, C: 5600 K, D: 0.3N
ND filter 1: CLEAR, 2: 0.6ND, 3: 1.2ND, 4: 1.6ND

Gain Settings: [ISO] mode: ISO 2500 to 12800

[db] mode: 0 dB to 18 dB (3 dB step)

Shutter Speed: [deg] mode: 1.0 deg to 360 deg (0.5 deg step)

[sec] mode: 1/24 sec to 1/250 sec.

Sensitivity: [Gamma: HD] mode:

F9 (2000 lx, 3200 K, 89.9 % reflection, 1080/59.94p)

F10 (2000 lx, 3200 K, 89.9 % reflection, 1080/50p)

Recording Module (AU-VREC1G)

When used with AU-V23HS1G

Memory Card Recorder

Recording Media: expressP2 card, P2 card, microP2 card

Recording Resolution:

1920 x 1080, 1280 x 720

Recording Frame Rate:

Maximum 240p/200p

System Frequency: 59.94p, 50p, 29.97p, 25p, 23.98p, 59.94i, 50i

Recording Format:


Recording Format: AVC-Intra222, AVC-Intra100,

(Sub Recorder) AVC-LongG 50, AVC-LongG 25

Recording Video Signal:

1080/59.94p, 50p, 29.97p, 25p, 23.98p, 59.94i, 50i, 720/59.94p, 50p

Recording Time:

When expressP2 card 512 GB is used1

Approx. 256 min. (AVC-Intra100, VFR OFF)

Approx. 64 min. (AVC-Intra100, VFR ON, 200 fps/240 fps)

Approx. 120 min. (ProRes 422 HQ, VFR ON, 60 fps)

When microP2 card 64 GB is used2

Approx. 64 min. (AVC-Intra100, 250p/29.97p)

Approx. 128 min. (AVC-LongG50, 25p/29.97p)

Approx. 256 min. (AVC-LongG25, 25p/29.97p)

Digital Video

Quantizing:

AVC-Intra2K444, AVC-Intra444: 12 bit

Others: 10 bit

Video Compression Format:

AVC-Intra444, AVC-Intra200, AVC-Intra222, AVC-Intra100:

MPEG-4 AVC/H.264 Intra Profile

AVC-LongG 50, AVC-LongG 25:

MPEG-4 AVC/H.264

ProRes 422 HQ, ProRes 4444: Apple ProRes

Digital Audio

Recording Audio Signal:

48 kHz/24 bit, 4 ch

Head room 18 dB/20 dB menu switchable

Proxy

File Format: MOV

Video Compression Format: H.264/AVC High Profile

Audio Compression Format: LPCM

Recording Time (1GB): Approx. 25 min.

Video Input/Output

SDI OUT: HD (1.5 G) /3G-SDI: 0.8 V [p-p], 75 Ω (1 set, 4 pieces)

MON OUT1: HD (1.5 G) /3G-SDI: 0.8 V [p-p], 75 Ω

MON OUT2: HD (1.5 G) /3G-SDI: 0.8 V [p-p], 75 Ω

VF SDI: HD (1.5 G) /3G-SDI: 0.8 V [p-p], 75 Ω

Audio Input/Output

AUDIO IN (CH1/CH2):

XLR x 2, 2-pin, LINE/MIC/MIC+48 V AES switchable

MIC IN: XLR 1 x 5-pin

PHONES: Stereo mini jack

Speaker: 20 mm diameter, round x 1

Other Input/Output

GENLOCK IN: HD (1.5 G) /3G-SDI: 0.8 V [p-p], 75 Ω

TC IN/OUT: BNC x 1, IN/OUT switch selection

IN: 0.5 V [p-p] to 8 V [p-p], 10 Ω

OUT: 2.0 V [p-p] ± 0.5 V [p-p], Low impedance

DC IN: XLR 4-pin, DC12 V (DC 11.0 V – 17.0 V)

DC OUT/RS:

4-pin, DC12 V (DC 11.0 V – 17.0 V),

maximum output current 1.0 A

DC OUT:

2-pin, DC12 V (DC 11.0 V – 17.0 V),

maximum output current 1.0 A

LENS:

12-pin

VF:

14-pin

LAN:

100BASE-TX/10BASE-T

USB 2.0 (DEVICE): Type B connector, 4-pin

USB 2.0 (HOST): Type A connector, 4-pin

Control Panel

Display Panel:

LCD, 3.5-type QHD color monitor

Approx. 1.56 million dots

Extension Module (AU-VEXT1G)

Power:

DC 12 V (11.0 V – 17.0 V)

Power Consumption: 33 W (Body only)

63 W (With all optional accessories connected and maximum power supplied from each output terminal)

Operating Temperature: 0°C to 40°C (32°F to 104°F)

Operating Humidity: 10% to 85% (Relative humidity)

Storage Temperature: -20°C to 60°C (–4°F to 140°F)

Weight:

Camera Extension Module: Approx. 0.95 kg

Recording Extension Module: Approx. 0.65 kg

Dimensions:

Camera Extension Module:

121 mm (W) x 143 mm (H) x 73 mm (D)

(4-13/16 inches x 5-11/16 inches x 2-7/8 inches)

Recording Extension Module:

106 mm (W) x 143 mm (H) x 61 mm (D)

(4-3/16 inches x 5-11/16 inches x 2-7/16 inches)

Input/Output

DC IN:

XLR 4-pin, DC 12 V (DC 11.0 V – 17.0 V)

DC OUT:

2-pin, DC 12 V (DC 11.0 V – 17.0 V),

maximum output current 1.0 A

EXT:

48-pin

Electronic HD Color View Finder (AU-VCVF2GJ)

Display Panel:

0.7-type OLED (Organic Light Emitting Diode) display

Input Video Signal:

1080/59.94p, 1080/50p, 1080/60p

Connector:

LEMO 14-pin

* These are reference values for continuous recording. The recording time may differ depending on the scene or number of clips.