



HD Broadcast Camera

## VariCam HS

Professional digital video camera revolutionising the Way Emotion is Created

### Key Features

2/3-type 2.2-megapixel 3MOS sensor

240fps Variable Frame Rate Recording -- 1 fps to 240 fps

In-camera color grading and Double Recorder with Dual Codec Recording

Wide dynamic range 14 stops of latitude

Apple ProRes 4:4:4:4 and ProRes HQ Built-in





## VariCam HS

<https://eu.connect.panasonic.com/fr/en/products/broadcast-proav/varicam-hs>

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

<b>Power</b>	DC 12 V(11.0 V - 17.0 V)
<b>Power Consumption</b>	60 W(Body only) 90 W(with all optional accessories connected and maximum power supplied from each output terminal)
<b>Operating Temperature</b>	0°C to 40°C
<b>Operating Humidity</b>	10% to 85% (relative humidity)
<b>Storage Temperature</b>	-20°C to 60°C
<b>Weight</b>	Approx. 4.5 kg (Excluding protrusion)
<b>Dimensions (W x H x D)</b>	179 mm x 230.5 mm x 347 mm (7-1/16inches x 9-1/16inches x 13 -21/32inches) (Body only, excluding protrusion)

### Camera Module (AU-V23HS1G)

<b>Pickup Devices</b>	2/3-type 2.2 million pixels, MOS x 3
<b>Lens Mount</b>	2/3-type bayonet
<b>Optical Filter</b>	CC filter A: 3200 K, B: 4300 K, C: 5600 K, D: 0.3ND ND filter 1: CLEAR, 2: 0.6ND, 3: 1.2ND, 4: 1.8ND
<b>Gain Settings</b>	[ISO] mode: ISO 2500 to 12800 [dB] mode : 0 to 18 dB (3dB step)
<b>Shutter Speed</b>	[deg] mode: 1.0 to 360deg (0.5deg step) [sec] mode: 1/24 to 1/250 (when 23.98p mode)
<b>Sensitivity</b>	[Gamma: HD] mode: F9 (2000 lx, 3200 K, 89.9% reflection, 1080/59.94p) F10 (2000 lx, 3200 K, 89.9% reflection, 1080/50p)
<b>Horizontal Resolution</b>	1000 TV lines or higher (center)

### Recording Module (AU-VREC1G) When it is used with AU-V23HS1G

<b>Memory Card Recorder</b>	
<b>Recording Media</b>	expressP2 card, P2 card, microP2 card
<b>Recording Resolution</b>	1920x1080, 1280x720
<b>Recording Framerate</b>	Maximum 240p/200p
<b>System Frequency</b>	59.94p, 50p, 29.97p, 25p, 23.98p, 59.94i, 50i
<b>Recording Format</b>	Main Recorder: AVC-Intra100, ProRes 422 HQ Sub Recorder: AVC-Intra100, AVC-LongG50, AVC-LongG25
<b>Recording Video Signal</b>	1080/59.94p, 50p, 29.97p, 25p, 23.98p, 59.94i, 50i 720/59.94p, 50p
<b>Recording Time (Main Codec)</b>	When expressP2 card 256 GB is used *1 Approx. 128 min. (AVC-Intra100, VFR OFF) Approx. 32 min. (AVC-Intra100, VFR ON, 200 fps/240 fps) Approx. 60 min. (ProRes 422 HQ, VFR ON, 60 fps)
<b>Recording Time (Sub Codec)</b>	When microP2 card 64 GB is used *1 Approx. 64 min. (AVC-Intra100, 25p/29.97p) Approx. 128 min. (AVC-LongG50, 25p/29.97p) Approx. 256 min. (AVC-LongG25, 25p/29.97p)
<b>Digital Video</b>	
<b>Quantizing</b>	10 bit
<b>Video Compression Format</b>	AVC-Intra100: MPEG-4 AVC/H.264 Intra Profile AVC-LongG50/AVC-LongG25: MPEG-4 AVC/H.264 ProRes 422 HQ
<b>Digital Audio</b>	
<b>Recording Audio Signal</b>	48 kHz/24 bit, 4 ch Head room 18 dB/20 dB menu switchable
<b>Proxy</b>	
<b>File Format</b>	MOV
<b>Video Compression Format (Proxy)</b>	H.264/AVC High Profile
<b>Audio Compression Format</b>	LPCM
<b>Recording Time (1GB)*1</b>	Approx.25 min.
<b>Video Input/Output</b>	
<b>SDI Out</b>	HD (1.5G)/3G SDI: 0.8 V[p-p], 75 ohms (1 set, 4 pieces)
<b>MON Out1</b>	HD (1.5G)/3G SDI: 0.8 V[p-p], 75 ohms

<b>MON Out2</b>	HD (1.5G)/3G SDI: 0.8 V[p-p], 75 ohms
<b>VF SDI</b>	HD (1.5G)/3G SDI: 0.8 V[p-p], 75 ohms
<b>Audio Input/Output</b>	
<b>Audio In (CH1/CH2)</b>	XLR x 2, 3 pin, LINE/MIC/MIC+48V/AES switchable
<b>MIC In</b>	XLR x 1, 5 pin
<b>Phones</b>	Stereo mini jack
<b>Speaker</b>	20 mm diameter, round x 1
<b>Other Input/Output</b>	
<b>Genlock In</b>	HD ( 1.5G ) /3G-SDI: 0.8 V [ p-p ] , 75 ohms
<b>TC In/Out</b>	BNCx1, IN/OUT switch selection IN: 0.5 V[p-p] to 8 V[p-p], 10 kohms OUT: 2.0 ± 0.5 V[p-p], Low impedance
<b>DC In</b>	XLR 4 pin, DC12 V (DC 11.0 V to 17.0 V)
<b>DC Out/RS</b>	4 pin, DC12 V (DC 11.0 V to 17.0 V), maximum output current 1.0 A
<b>DC Out</b>	2 pin, DC12 V (DC11.0 V to 17.0 V), maximum output current 1.0 A
<b>Lens</b>	12 pin
<b>VF</b>	14 pin
<b>LAN</b>	100BASE-TX/10BASE-T
<b>USB 2.0 (Device)</b>	Type B connector, 4 pin
<b>USB 2.0 (Host)</b>	Type A connector, 4 pin
<b>Control Panel</b>	
<b>Display Panel</b>	LCD, 3.5-type QHD color monitor Approx. 1.56 million dots
<b>Electronic HD Color View Finder (AU-VCVF1G)</b>	
<b>Display Panel (Electronic HD Color View Finder)</b>	OLED, 0.7-type, 2.76 million dots
<b>Signal Input</b>	1080/59.94p, 1080/50p, 1080/60p
<b>Note</b>	*1: These are reference values for continuous recording. The recording time may differ depending on the scene or number of clips.  ProRes is licensed from Apple Inc. Apple ProRes codec from Atomos under license. Atomos is trademark and copyright of Atomos Global Pty. Ltd.  The use of DCF Technologies is under license from Multi-Format, Inc.