Panasonic

4K/IP Studio Camera System

AK-UC3300 Series 4K Studio Camera

AK-UCU700 Series



Overwhelming image quality with a resolution of 2,000 TV lines.

The camera is equipped with a large 11.14-megapixel 4K image sensor and uses oversampling to achieves horizontal and vertical resolution of 2,000 TV lines. An S/N ratio of 62 dB or higher is maintained with a high sensitivity of F10/59.94 Hz, F11/50 Hz enabling shooting of expressive, high-quality video.



^{*} This unit does not support Build-up Units. When using box lenses, a lens supporter from the lens manufacturer is required. Lens and viewfinder are optional accessories.

11.14-megapixel 4K image sensor

With a large 11.14-megapixel 4K image sensor, high sensitivity of F10/59.94 Hz, F11/50 Hz (2,000 lx) and low noise with an S/N ratio of 62 dB or higher are achieved. In addition, oversampling



achieves a resolution of 2,000 TV lines in the horizontal and vertical directions for a richly detailed high-resolution images.

HD Hi-Speed mode support*1

2x high-speed shooting is supported in 1080p*1 and 1080i*1.

 $\label{eq:homode} \textbf{HD Hi-Speed output} \text{ (When in Hi-Speed mode. When using AK-UCU700 CCU series.)}$

 $\frac{1080/59.94 p-120 fps^{*1},\ 1080/50 p-100 fps^{*1},}{1080/59.94 i-120 fps^{*1},\ 1080/50 i-100 fps^{*1}}$

CCU*2 with Flexible Connectivity

This camera supports the uncompressed 12G-SDI output that is needed in the 4K age. In addition to SMPTE ST 2110, the AK-UC3300 supports diverse IP standards, including industry-first*3 support for Dante®, NDI® and SRT,*2 enabling the creation of IP studio camera systems for wide-ranging network environments and applications.

4K/HD multi-format support

Multiple 4K/HD formats are supported, enabling use adapted to the operation application.

Supported formats (Supported Formats varies depending on the connected AK-UCU700 CCU series.)



2160/59.94p, 2160/50p, 2160/29.97p*4, 2160/25p*4, 2160/23.98p*4



1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 1080/29.97p*4, 1080/29.97PsF*4, 1080/25p*4, 1080/25PsF*4, 1080/23.98p*4, 1080/23.98psF*4, 1080/23.98p over 59.94i*4

Low-skew shooting

The AK-UC3300GJ/UC3300GSJ supports a high reading speed of 1/100 of a second, compared to 1/60 of a second on standard cameras. The skewing characteristic of MOS sensors has been reduced by reading out the MOS sensor signal at high speed.

Skew reduction images





* Images are simulated.

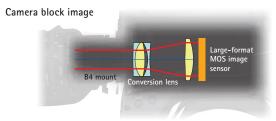
Standard camera (1/60 sec.)

AK-UC3300 (1/100 sec.)

^{*1:} High-speed shooting when using AK-UCU700 CCU series will be supported in the future. *2: When using AK-UCU700 CCU series (see page 5 for details). *3: First studio camera system to support Dante® audio networks, NDI® and SRT as of October 2023 launch, according to Panasonic Connect research. *4: To be supported when using AK-UCU700 CCU series.

B4 mount

The 2/3 lens can be used without an external adaptor, and the internal lens is specially designed for large sensors, ensuring high video quality. This new acquisition method maximizes the effectiveness of incident light.



* Images are simulated

Digital extender (2x)

Video image size is doubled by the digital signal processing circuit, enabling high-magnification shooting even with low-magnification lenses. Sufficient resolution is maintained even when the image is magnified and the light reduction seen with extender lenses is prevented.

Built-in optical filter

The internal ND filter can be used in various shooting environments. ND filters: Through, 1/4, 1/16, 1/64

Chromatic Aberration Compensation (CAC)

This exclusive technology utilizes communication between the lens and camera to deploy a sophisticated algorithm that automatically compensates for registration errors caused by lens chromatic aberration and minimizes the circumjacent blur.

Focus assist functions

Quick and accurate focusing is supported with focus assist functions such as Focus Bar (indicates focus level), Focus-in-Red (uses color to indicate areas in focus), MAG (magnifies central portion), and Square (shows focus status of screen as a whole). Lenses with auto focus and focus assist capabilities are also supported*1. The Remote Operation Panel (ROP) can also be used to focus and zoom while using the digital lens.

Focus assist function examples





Focus-in-Red





Doll in focus

Focus Square

1: Contact lens manufacturers for compatible lenses.

HDR (High Dynamic Range)



This mode provides rich gradation to render contrast, color and shadow in highlights and dark image areas that could not previously be reproduced due to overexposure and black defects respectively, resulting in more realistic image quality. Variable HDR that makes optimal adjustments for a wide dynamic range is supported. In addition, it is possible to configure a system supporting simultaneous 4K HDR/SDR in order to handle production environments with both. The SDR signal can suppress blown-out highlights with the offset gain function from the HDR, and the same knee adjustment as for HDR can be performed for highlights.





Wide color range with ITU-R BT.2020

This camera is compatible with ITU-R BT.2020, a color space that can recreate almost every color in the natural world, enabling visual expression with excellent color reproduction.

Flash band correction*2

The problem of flash bands (a phenomenon whereby dark and light areas are produced in the same frame when the flash is released) is resolved by the high-precision flash band detection and correction of the camera signal processing LSI.

Diverse color correction functions

In addition to EBU and NTSC preset color matrices, users can perform 12-pole color correction and individual adjustment of saturation and hue with a linear matrix. In addition, the separate skin color adjustment function (Skin Correction) enables more fine-tuned color expression.

Skin tone detail correction

Tone down wrinkles and blemishes in on air personalities to beautifully shoot natural skin tones. Not limited to skin tones, this correction feature can be applied to any hue phase and can define three independent tone ranges for correction. A function to select and directly adjust a specific color is also included.

Shockless gain

It is possible to smoothly transition the image changes that occur when the gain is changed. In addition, with the 0.1 dB step master gain adjustment function, you can fine tune the adjustments to match the scene being shot.

Long-distance transmission

Long-distance transmission of uncompressed video signals to the Camera Control Unit (CCU) via optical fiber is supported. Transmission of approximately 2 km is possible when power is supplied from the CCU. In addition, the transmission distance can be extended up to 10 km by using an external power supply for the camera and general-purpose optical transmission equipment*3. In addition to a dedicated serial line, IP connection via LAN cable is also supported for control between the CCU and the Remote Operation Panel (ROP).

^{*2:} Does not function when in 4K mode.
*3: If the transmission distance is extended by connecting fibers at multiple points, the distance will be reduced due to signal attenuation Use of repeaters as appropriate is also recommended.

Video and data transmission (TRUNK)

Video and data can be transmitted between the camera and CCU using only an optical cable, enabling the system to be upgraded according to the operating conditions.

- HD-SDI (CCU→camera) two lines (internal FS), VBS (CCU→camera) two lines*:
 This line can be used for monitoring (studio floor monitor) with a prompter, fixed return or camera, etc.
- HD-SDI (camera→CCU) one line (internal FS):

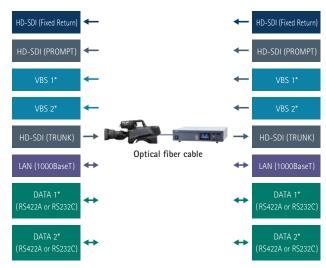
This line can be used to output video from a handheld or PTZ Camera in the studio or the field, etc. to the CCU (system). Since the camera video input is equipped with a frame synchronizer, asynchronous video signals can also be used

• LAN (1000BaseT) one line:

To be used to control external devices and PTZ Cameras by IP protocol. Transmission of streaming video is also supported.

• DATA (RS422A or RS232C) two lines*:

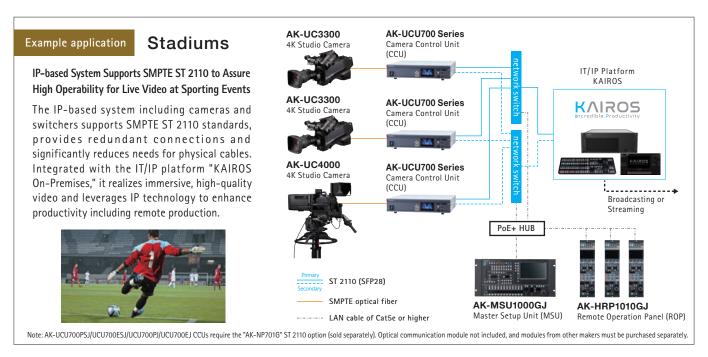
These lines can be used to transfer lens and pedestal position data in a virtual system.



^{*} Only when connected to AK-UCU600 Series.

Detailed settings and functions optimized for operability

- For camera head output (HD-SDI 1/HD-SDI 2), it is possible to select 1080p, 1080i, and 720p.
- Color temperature display and adjustment function (2000 K to 15000 K variable).
- Camera settings, such as video adjustments, can be saved to an SD memory card.
- The lens file function enables flare and shading values to be saved.
- Support for IP control.
- There are four user buttons on the camera head, with four on the AK-HVF100GJ LCD viewfinder and three on the AK-HVF75GJ LCD viewfinder.
- Two intercom lines can be connected with separate intercom lines.



Interface option for CCU





Dante® audio interface option for AK-UCU700PSJ/ESJ/PJ/EJ



. * Available as standard feature on the AK-UCU710.

Streaming I/O option for AK-UCU700PSJ/ESJ/PJ/EJ, AK-UCU710PSJ/ESJ/PJ/EJ



^{*} Audinate®, the Audinate logo and Dante® are registered trademarks of Audinate Pty Ltd.

^{*} NDI® is a new protocol developed by NewTek, Inc. that supports IP video production workflow. NDI® is a registered trademark of NewTek, Inc. in the United States and other countries.

ST 2110 and Dante® I/Fs installed Model

AK-UCU710PSJ/ESJ (LEMO Connector Model) AK-UCU710PJ/EJ (Tajimi Connector Model)

Basic Model

AK-UCU700PSJ/ESJ (LEMO Connector Model) AK-UCU700PJ/EJ (Tajimi Connector Model)

Camera Control Unit (CCU) NEW

Supports simultaneous 4K HDR and HD SDR, plus ST 2110 and Dante® (industry first*1)

*Dante® is a registered trademark of Audinate Pty Ltd..







Camera Control Unit (CCU)			SMPTE ST 2110		Dante® Audio	NDI®	SRT	
Camera Control Unit (CCU)		4K	HD	JPEG XS	Dante Audio	NDI-	SNI	
ST 2110 and Dante®	LEMO	AK-UCU710PSJ AK-UCU710ESJ	√	√	√	√		
Installed Model	Tajimi	AK-UCU710PJ AK-UCU710EJ	Standard	Standard	Standard	Standard	Sold separately Streaming option	
Basic Model	LEMO	AK-UCU700PSJ AK-UCU700ESJ	Sold separately ST 2110 option (AK-NP701G)		Sold separately Dante® audio option	(AK-NP703G)		
Dasic Would	Tajimi	AK-UCU700PJ AK-UCU700EJ			(AK-NP702G)			

Supports 4K/HDR operation and HD high-speed shooting

- Uncompressed optical transmission between camera and CCU over distances up to about 2,000m.*2
- Simultaneous output of HDR and SDR or HDR BT.2020 and BT.709.
- Eight standard SDI outputs, including two 12G-SDI outputs.
- High-speed shooting: Up to 2x in HD.*3

Supported formats

UHD	3840 x 2160/59.94p, 50p, 29.97p*4, 25p*4, 23.98p*4
HD	1080/59.94p, 50p, 59.94i, 50i, 29.97p*4, 29.97PsF*4, 25p*4, 25PsF*4, 23.98p*4, 23.98PsF*4, 23.98p over 59.94i*4
HD High Speed*3	1080/59.94p-120fps, 1080/50p-100fps, 1080/59.94i-120fps, 1080/50i-100fps

Supports 3 independent IP interfaces

- Uncompressed or JPEG XS 4K/HD IP transmission with ST 2110/NMOS option.*5
- Redundant operation with two SFP28 terminals.*5
- The industry's first*1 support for Dante®*6 network audio, as well as NDI®*7*8 and SRT for streaming.



Color LCD touch panel

- 3.5-inch color LCD touch panel for intuitive operation and viewing camera output without requiring an external monitor.
- PC web browser can be used to remotely configure settings.

Rear View (When all options are installed)



- *1: First studio camera system to support Dante® audio networks, NDI® and SRT as of October 2023, according to Panasonic Connect research.
 *2: When power is supplied from CCU.
- *3: To be supported through firmware update. HD High Speed mode is available when using AK-UC3300 studio camera.
 *4: Future support planned.

- *4: Future support planned.

 *5: Standard in AK-UCU710PSJ/ESJ/PJ/EJ and optional in AK-UCU700PSJ/ESJ/PJ/EJ (requires ST 2110 option AK-NP701G sold separately).

 Optical communication module is not included. A third-party optical module must be purchased separately.

 *6: Standard in AK-UCU710PSJ/ESJ/PJ/EJ and optional in AK-UCU700PSJ/ESJ/PJ/EJ (requires Dante® audio option AK-NP702G sold separately).

 *7: NDI® is a new protocol developed by NewTek, Inc. that supports IP video production workflow. NDI® is a registered trademark of NewTek, Inc. in the United States and other countries.

 *8: Requires AK-NP703G Streaming option sold separately.

Specifications

4K Studio Camera AK-UC3300GJ/UC3300GSJ

TR Studio Cullera	7117 0000000000000000000000000000000000
GENERAL	
Power Supply	DC 12 V (when using an external power supply) AC 240 V, 50 Hz/60 Hz (when AK-UCU600PJ/UCU600PSJ/UCU600EJ/UCU600ESJ is connected)
Power Consumption	119 W (maximum, when connecting to an external 12 V and including supply to an externally connected devices) 170 W (maximum, when AK-UCU600PJ/UCU600PSJ/UCU600ESJ/UCU600ESJ is connected and including supply to an externally connected devices)
Ambient Operating Temperature	-10 °C to 45 °C (14 °F to 113 °F) (Preheating required under a temperature 0 °C (32 °F) or below)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Ambient Operating Humidity	85% or less (relative humidity)
Weight	Approx. 4.3 kg (9.46 lbs.) (body only, excluding the accessories)
Dimensions (W x H x D)	Body only 151 mm x 267 mm x 374 mm (5-31/32 inches x 10-17/32 inches x 14-23/32 inches) (excluding protrusions)
Camera Unit	
Pickup Device	11.14 million pixels, MOS Sensor
Optical Filter	ND: Clear, 1/4, 1/16, 1/64
Lens Mount	2/3-type bayonet
Sensitivity	Two shooting modes [HIGH SENS]: F10 (59.94 Hz)/F11 (50 Hz) [NORMAL]: F6 (59.94 Hz)/F7 (50 Hz) 2000 lx, 3200 K, when white reflectivity is 89.9%
Horizontal Modulation	50% or above (27.5 MHz)
S/N	62 dB or above
Horizontal Resolution	HD: 1000 TV lines or above (center) 4K: 2000 TV lines or above (center, AK-UCU600PJ/UCU600PSJ/UCU600EJ/UCU600ESJ output)
Gain Switching	[NORMAL]: -6, -3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36 [HIGH SENS]: -6, -3, 0, 3, 6, 9, 12, 15, 18, 21, 24, 27, 30, 33, 36
Shutter Speed	1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000 •[29.97p] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000 •[23.98p] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000 •[501]/[50p] mode: 1/60, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000 •[25p] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/1500, 1/2000
System Format	3840 x 2160/59.94p/50p/29.97p/25p/23.98p 1920 x 1080/59.94p/59.94p(2x)/50p/50p(2x)/29.97p/25p/23.98p
Video Input/Output	
<hd 1="" sdi=""> terminal</hd>	BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω
<hd 2="" sdi=""> terminal</hd>	BNC x 1 3G/1.5G-SDI: 0.8 V [p-p], 75 Ω
<aux> terminal</aux>	BNC x 1 Functions as <hd trunk=""> terminal/<prompter2> terminal by switching the setting in the menu <hd trunk="">: 1.5G-5DI: $0.8 \ V [p-p]$, $75 \ \Omega$ <prompter2>: VBS signal 1 V $[p-p]$, $75 \ \Omega$</prompter2></hd></prompter2></hd>
<g in="" l="" out="" prompter=""> terminal</g>	BNC x 1 <g in="" l="">: Tri-level SYNC or black burst <prompter out="">: VBS signal 1 V [p-p], 75 \(\Omega\$ Functions as <g in="" l=""> when standalone, and as <prompter out=""> when AK-UCU600PJ/UCU600PSJ/UCU600ESJ/UCU600ESJ is connected</prompter></g></prompter></g>
Audio Input/Output	
<mic 1=""> terminal</mic>	XLR x 1, 3-pin, female type <lines <mic="">/<+48V> switchable For <mic>, <front>/<rear> switchable <line>: 0 dBu, +4 dBu menu selection available <mic>: -60 dBu, -40 dBu, or -20 dBu menu can be selected</mic></line></rear></front></mic></lines>
<mic 2=""> terminal</mic>	XLR x 1, 3-pin, female type <line>/<mic>/<+48V> switchable <line>: 0 dBu, +4 dBu menu selection available <mic>: -60 dBu, -40 dBu, or -20 dBu menu can be selected</mic></line></mic></line>
<mic> terminal (front)</mic>	XLR x 1, 3-pin, female type Switchable with <mic 1=""> terminal</mic>
Intercom	
<intercom1> terminal</intercom1>	XLR x 1, 5-pin, female type
<intercom2> terminal</intercom2>	XLR x 1, 5-pin, female type
<earphone> terminal</earphone>	Stereo mini jack x 1

Other Input/Output		
<opt fiber=""> terminal</opt>	Optical composite connector x 1	
<lens> terminal</lens>	12-pin x 1	
<vf> terminal</vf>	20-pin x 1	
<vf> terminal (rear)</vf>	29-pin x 1	
<dc in=""> terminal</dc>	XLR x 1, 4-pin, DC 12 V	
<dc 1="" 12="" a="" out="" v=""> terminal</dc>	4-pin x 1	
<ret ctrl=""> terminal</ret>	6-pin x 1	
<ext i="" o=""> terminal</ext>	20-pin x 1, DC 12 V, 0.5 A	
<remote> terminal</remote>	10-pin x 1	
<trunk> terminal</trunk>	12-pin x 1	
<dc 12="" 2.5="" a="" out="" v=""> terminal</dc>	2-pin x 1	
<lan> terminal</lan>	RJ-45 x 1	

Camera Control Unit (CCU) AK-UCU710PSJ/UCU710ESJ/UCU710PJ/UCU710EJ AK-UCU700PSJ/UCU700ESJ/UCU700PJ/UCU700EJ

	1007/ 0107/10 20 1/ (00 1/		
Power Supply	100 V - 240 V AC, 50 Hz/60 Hz		
Power Consumption	550 W (Without camera connected: 130 W)		
Capacity for Supplying Power to a Camera	AC 240 V, 1.46 A, 50 Hz/60 Hz		
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)		
Humidity	10 % to 90 % (no condensation)		
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)		
Weight	AK-UCU710: Approx. 9.3 kg (20.46 lb) AK-UCU700: Approx. 9.1 kg (20.02 lb)		
Dimensions (W x H x D)	424 mm x 88.5 mm x 400 mm (16-11/16 inches x 3-15/32 inches x 15-3/4 inches) (excluding protrusions)		
	3G/HD-SDI: 5 lines		
Video Output	12G/6G/3G/HD-SDI: 2 lines		
	HD-SDI: 1 line (shared with picture monitor output)		
HD TRUNK Output	3G/HD-SDI: 1 line		
AUX Output	3G/HD-SDI: 1 line		
Return Input	3G/HD-SDI: 4 lines		
HD TRUNK (Prompter) Input	3G/HD-SDI: 1 line		
Reference Input	BB (black burst) / tri-level: 1 line (automatic termination, connect to upper connector; BB signal ar tri-level signal automatically recognized, with loop-through output		
Microphone Output	0 dBm/600 Ω, 2 lines (XLR, 3-pin, male)		
	Intercom input/output (ENG/ PROD, 0 dBm, 600 Ω (4 W) / 1 V [p-p], 200 Ω (RTS), 4 W / RTS / CLRCOM): 2 lines		
Communication	PGM input (0 dBm/600 Ω): 2 lines		
	Tally input (red, green, yellow): 1 input each		
Tally Output	Tally output (red, green) Alarm output Output from each of the open collectors		
ROP	RS-422 1 line, 16 V DC output		
MSU	RS-422 1 line, 16 V DC output		
LAN TRUNK	1 line		
LAN	1 line		
LCD monitor	3.5 inch color LCD monitor, touch panel supported		
ST 2110 (Only AK-UCU710)	SFP+/SFP28 x 2 * Standard in AK-UCU710 and optional in AK-UCU700 (requires ST 2110 option AK-NP701G sold separately).		
Dante® (Only AK-UCU710)	RJ45 x 2 * Standard in AK-UCU710 and optional in AK-UCU700 (requires Dante® audio option AK-NP702G sold separately).		

Remote Operation Panel (ROP) AK-HRP1010GJ/HRP1015GJ/HRP250GJ

GENERAL				
Power Supply	AK-HRP1010GJ: 12 V DC (Power supply from camera/CCU: 10 V - 16 V DC) 42 V - 57 V DC (PoE power supply) AK-HRP1015GJ/HRP250GJ: 12 V DC (Power supply from camera: 10 V - 16 V DC) 42 V - 57 V DC (PoE power supply)			
Power Consumption	AK-HRP1010GJ: 0.9 A (Power supply from camera/CCU: 10 V - 16 V DC) 0.3 A (PoE power supply) AK-HRP1015GJ: 0.44 A (Power supply from camera: 10 V - 16 V DC) 0.11 A (PoE power supply) AK-HRP250GJ: 0.51 A (Power supply from camera: 10 V - 16 V DC) 0.15 A (PoE power supply)			
Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)			
Humidity	90% or less			
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)			
Weight	AK-HRP1010GJ: Approx. 1.7 kg (3.75 lb) AK-HRP1015GJ: Approx. 1.5 kg (3.3 lb) AK-HRP250GJ: Approx. 1.4 kg (3.08 lb)			
Dimensions (W x H x D)	AK-HRP1010GJ: 102 mm x 385 mm x 113 mm (4 inches x 15-3/16 inches x 4-7/16 inches) AK-HRP1015GJ: 82 mm x 355 mm x 124.4 mm (3-1/4 inches x 14 inches x 4-7/8 inches) AK-HRP250GJ: 92 mm x 308 mm x 67 mm (3-5/8 inches x 12-1/8 inches x 2-5/8 inches)			
Camera/CCU Control	Control signals (camera, CCU control) Power supply 16 V DC (when CCU connected)*1, 12 V DC (when camera connected)*1			
Maximum Cable Length	When camera connected: 20 m (65.7 ft) When CCU connected: 50 m (164 ft)			
Monitor				
LCD Monitor	AK-HRP1010GJ: LCD color monitor, touch panel support AK-HRP1015GJ: LCD color monitor			
Input/Output Section	n			
<ccu> connector</ccu>	10-pin, male x 1			
<preview> connector</preview>	9-pin, female x 1			
<lan> connector</lan>	AK-HRP1010GJ: RJ-45 \times 1 AK-HRP1015GJ/HRP250GJ: RJ-45 \times 1 (equipped with a robust LAN terminal connector)			

Master Setup Unit (MSU) AK-MSU1000GJ

Power Supply	12 V DC (DC input range: 10 V - 16 V DC) 42 V - 57 V DC (PoE+ power supply)
Power Consumption	1.6 A (Power supply: 12 V DC) 0.6 A (PoE+ power supply)

Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Humidity	90% or less
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Weight	Approx. 4.0 kg (8.82 lb)
Dimensions (W x H x D)	482 mm x 222 mm x 81.5 mm (18-31/32 inches x 8-3/4 inches x 3-7/32 inches) (including mounting brackets and dial heights)
Adjustment Functions	Scene file, ND filter, CC filter, Color temperature (COLOR TEMP), Master gain (MASTER GAIN), Shutter (SHUTTER), Master pedestal (MPED), Iris (IRIS), Camera selection
CCU Control	RS422 or IP
Maximum Cable Length	When CCU is connected: 50 m (164 ft)

22.9 cm (9 inches) LCD Color Viewfinder AK-HVF100GJ

Power Supply	DC 12 V (supplied from camera or XLR)
	, , ,
Power Consumption	18 W
Operating Temperature	0 °C to 45 °C (32 °F to 113 °F)
Operating Humidity	10% to 85% (no condensation)
Storage Temperature	-20 °C to 60 °C (-4 °F to 140 °F)
Weight	Approx. 2.6 kg (5.73 lbs.) (not including hood) / Approx. 3.0 kg (6.61 lbs.) (including hood)
Dimensions (W x H x D)	340 mm x 234 mm x 193 mm (13-13/32 inches x 9-7/32 inches x 7-5/8 inches) (not including hood) 340 mm x 234 mm x 231 mm (13-13/32 inches x 9-7/32 inches x 9-1/8 inches) (including hood)
Display Panel	22.9 cm (9.0 inches)
Number of Pixels	1920 x 1080 (FHD)
Display Color	Approx. 16.77 million colors
Operation	<power> switch, <menu> button, <select> dial button, <f1>/<f2>/<f3>/<f4> buttons, <bright> knob, <contrast> knob, <peaking> knob, <input/> switch</peaking></contrast></bright></f4></f3></f2></f1></select></menu></power>
Connector	Camera I/F connector (D-sub 29 pins x 1) SDI IN connector (BNC x 1) DC IN connector (XLR 4 pins x 1)
Supported Signal Format	CAM: 1080/59.94i, 1080/50i SDI: 1080/59.94p, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p

^{*1:} Can be provided from CCU

Rear View



AK-HRP1010GJ



AK-HRP1015GJ/HRP250GJ



AK-MSU1000GJ



Unit: mm(inches)

Compact operation panels that support IP control and PoE*1 power supply.

AK-HRP1010GJ Remote Operation Panel (ROP)

AK-HRP1015GJ

Remote Operation Panel (ROP)

*1: Abbreviation of Power over Ethernet. *2: For information on 4K/HD Integrated Camera support, please refer to the Panasonic website

- Camera serial control and IP control are possible. Panasonic 4K/HD Integrated Cameras are supported*2.
- Equipped with joystick control lever. IRIS/PEDESTAL operation is possible.
- Equipped with scene file function.
- Equipped with SD memory card slot. Saving of user files and firmware version updates are supported.
- IP connection and PoE*1 power supply are supported. The AK-HRP1015GJ/HRP250GJ are equipped with a robust LAN terminal connector.

(https://pro-av.panasonic.net/en/products/compatibility_chart/).

AK-HRP250GJ

Remote Operation Panel (ROP)



AK-HRP1010GI AK-HRP1015GI AK-HRP250GJ Up to 99 CCUs can be connected and controlled.

AK-MSU1000GJ

Master Setup Unit (MSU)



- IP connection: up to 99 Serial connection: up to 6
- Equipped with 17.8cm (7 inches) LCD menu touch panel.

Equipped with high-resolution 22.9 cm (9 inches) LCD panel and new lift mechanism.

AK-HVF100GJ

22.9 cm (9 inches) LCD Color Viewfinder

• Equipped with full HD (1920 x 1080) 22.9 cm (9 inches) color LCD panel.

Equipped with high-resolution 1.78 cm (0.7 inches) full HD OLED panel.

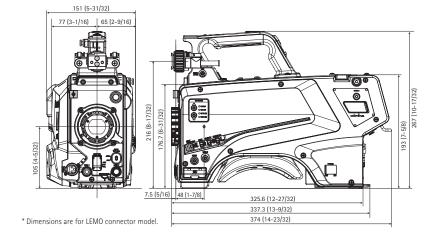
AJ-CVF70GJ

1.78 cm (0.7 inches) Full HD OLED Color Viewfinder

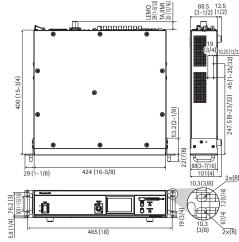
• Equipped with 1.78 cm (0.7 inches) full HD OLED panel and 38mm large-diameter eyepiece.

Dimensions

■ AK-UC3300GJ/3300GSJ



■ AK-UCU710PSJ/UCU710ESJ/UCU710PJ/UCU710EJ AK-UCU700PSJ/UCU700ESJ/UCU700PJ/UCU700EJ



* Dimensions are for LEMO connector model.

Panasonic

Panasonic Entertainment & Communication Co., Ltd. 1-10-12 Yagumo-higashi-machi, Moriguchi City, Osaka 570-0021, Japan



For more information, please visit Panasonic web site https://pro-av.panasonic.net/en/qr/



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