Superior usability for existing HD and new 4K video production with simultaneous UHD(4K)/HD/SD output and standard B4 mount for standard 2/3" lenses

With the newly developed large-format 4K sensor, AK-UC3000 4K Studio Camera produces highly expressive 4K video with rich gradation in addition to supporting simultaneous HD/SD.
**New-generation 4K video**

Applying built-in conversion lens, 2/3-type lens can be used with this 4K large-format camera without an adapter achieving excellent image quality. The new imaging system makes maximum use of incident light to achieve a wide dynamic range.

**UHD and HD/SD output supported**

The AK-UC3000 camera system handles UHD as well as HD/SD output simultaneously*1. You can select the video output based on applications. (See below chart for the supported video format.)

* Images are simulated.

---

**List of supported formats**

<table>
<thead>
<tr>
<th>Format</th>
<th>Supported Video Formats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UHD</strong></td>
<td>3840×2160/59.94p, 50p, 29.97p, 25p, 23.98p, 29.97PsF, 25PsF, 23.98PsF</td>
</tr>
<tr>
<td><strong>HD</strong></td>
<td>1080/59.94p, 50p, 59.94i, 50i, 23.98p over 59.94i, 29.97PsF, 25PsF, 23.98PsF, 720/59.94p, 50p</td>
</tr>
<tr>
<td><strong>SD</strong></td>
<td>480/59.94i, 576/50i</td>
</tr>
</tbody>
</table>

*1: AK-UCU500 Camera Control Unit (CCU) outputs UHD/HD/SD video.

---

**Control via serial or IP mode**

<table>
<thead>
<tr>
<th>CCU, Serial Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK-UC3000GJ/GSJ</td>
</tr>
<tr>
<td>Optical Fiber</td>
</tr>
<tr>
<td>AK-UCU500</td>
</tr>
<tr>
<td>Serial Connection</td>
</tr>
<tr>
<td>AK-HRP1000GJ</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>AK-HRP1005GJ</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>CCU, IP Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>AK-UC3000GJ/GSJ</td>
</tr>
<tr>
<td>Optical Fiber</td>
</tr>
<tr>
<td>AK-UCU500</td>
</tr>
<tr>
<td>IP Connection (PoE Hub)</td>
</tr>
<tr>
<td>AK-HRP1000GJ</td>
</tr>
<tr>
<td>or</td>
</tr>
<tr>
<td>AK-HRP1005GJ</td>
</tr>
</tbody>
</table>

---

* Lens and viewfinder are optional. Photo shows a system example using Fujinon 2/3-type 4K ULTRA HDTV Zoom Lens.
High-quality video and excellent operability
With the AK-UCU500 Camera Control Unit (CCU), uncompressed long-distance transmission of 4K/HD video signals via optical fiber is supported. The AK-HRP1000GJ/1005GJ Remote Operation Panel (ROP) is equipped with a color LCD display that provides excellent visibility. In combination, this system achieves high-quality video and excellent operability. In cases where power is supplied by the CCU, it is possible to transmit at a long distance of up to approx. 2,000 m between the camera and the CCU. The distance can be extended up to 10,000 m¹ by providing a local power supply at the camera head and using general-purpose single mode optical fiber. Between the CCU and the ROP, in addition to a dedicated serial line, IP connection via LAN cable is also supported.

High sensitivity and low noise
The AK-UC3000 is equipped with a newly developed large-format 4K MOS sensor. Two shooting modes can be selected. In High Sensing Mode, it is possible to obtain an S/N ratio of 60 dB or higher while also achieving F10 high sensitivity. The result is low-noise and high-image-quality video.

Skew reduction realized through high-speed scans
Building on the knowhow accumulated in Panasonic’s ENG camera experience, the skewing characteristic of MOS sensors has been reduced by reading out the MOS sensor signal at high speed.

Dynamic Range Stretch (DRS) function³
The DRS function automatically suppresses blocked shadows and blown highlights. When dark and bright areas are mixed in the same scene, such as when looking outside from indoors, DRS can maintain a high level of gradation expression in dark, bright, and intermediate tones, thereby minimizing blocked shadows, blown highlights, and washed out colors. This makes it possible to obtain visually wide dynamic range video in real time.

Selectable gamma curves
In addition to the Film Rec Gamma functions (V-REC, F-REC) supporting digital film production, you can select the Filmlike 1/2/3 modes. They produce natural gradations and rich color reproduction with a film-like quality.

HDR (High Dynamic Range) compatibility
This mode enables the camera to apply an alternative optical electro transfer function (OETF) to selected camera outputs so that the camera can provide a high dynamic range (HDR) image for capable displays or function in a complete HDR live broadcast system. HDR displays use their increased brightness and contrast capabilities to take advantage of the cameras full dynamic range to deliver compelling high contrast images with very bright highlights.

Shockless gain
It is possible to smoothly transition the image changes that occur when 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.

Diverse color correction functions
In addition to EBU and NTSC preset color matrix, camera users can save two custom specified linear matrix tables, and additionally tune the saturation and hue individual colors with 12-pole color correction system. Specific skin tones can also be adjusted in addition to the primary secondary and tertiary colors in the 12-pole system.

Chromatic Aberration Compensation (CAC)
This exclusive technology utilizes communication between the lens and camera to deploy for a sophisticated algorithm that will automatically compensate for the registration error caused by lens chromatic aberration, and minimize the circumjacent blur.²

Skin Tone Detail Correction
Tone down wrinkles and blemishes in on air personalities to beautifully shoot natural skin tones. While designed to soften skin tones the skin tone detail feature can be applied to any hue phase so it could likewise be used to soften areas of other colors (such as green grass). The skin tone detail feature can define three independent skin tone ranges to manage different light levels or different people on camera. Skin-tone-get feature finds a specific color in frame to simplify the set up process.

¹: Adverse conditions, additional patching and longer runs will require repeater devices. ²: For software supporting Chromatic Aberration Compensation (CAC) file, please download from “Software download” on Panasonic website: http://pro-av.panasonic.net/en/ ³: Only when in HD mode.

* Images are simulated.
Servo control ND / CC filters
The cameras are equipped with filters for a variety of shooting environments. [ND filters] CAP, Through, 1/4, 1/16, 1/64 [CC filters] Cross, 3200 K, 4300 K, 6300 K, Diffusion

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.

Camera standalone output formats
For camera head output (HD SDI 1/HD SDI 2), it is possible to select 1080p, 1080i, and 720p.

Extensive video and data transmission (TRUNK) functions
Since video and data can be transmitted between the camera and a Camera Control Unit (CCU) using optical fiber cable alone, system expansion to match operation conditions is possible.
- HD SDI (CCU→camera) two lines, VBS (CCU→camera) two lines: Can be used for monitoring with prompter, fixed return or camera (studio floor monitor), etc.
- HD SDI (camera→CCU) one line*: This line can be used to transmit an additional video signal of a handheld or remote camera to the studio. 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 remote cameras by IP protocol. Transmission of streaming video is also supported.
- DATA (RS422A or RS232C) two lines: Can be used to transfer lens and pedestal position data in a virtual system.

Detailed settings and functions optimized for operability
- Color temperature display and adjustment function (2000 K to 15000 K variable).
- Transmission of up to 10,000 m possible using single fiber.*3
- It is possible to save camera settings, such as video adjustments, on an SD memory card. Firmware version upgrades are also supported.
- A lens filter function to save flare and shading values.
- Support for IP streaming and IP control.
- The NewTek Software “NewTek AutoLink for Panasonic PTZ”*4, which is available on the Internet, allows Panasonic professional cameras equipped with IP streaming to be automatically detected from NewTek TriCaster® and IP series Video Mix Engine on the network, enabling direct use of IP streaming from the cameras with these NewTek products.
- DC12 V 2.5 A and 1.0 A output as a standard feature. This can be used as a power source for large lenses, prompters, and sub-monitors.
- There are four user buttons (enabling function selection) on the camera head and four on the viewfinder. They support rapid shooting by the camera operator.

Intercom connection
With two independent intercom lines, in addition to Intercom 1 and Intercom 2 switching, an Intercom 1 and 2 mix mode has been added and can be selected to observe the situation. With the Intercom front/rear switch and front volume, it is possible to adjust the intercom audio level even when the camera is being used from the shoulder.

New slanted-line design improves mobility and operability
The functional layout of controls improves ease of use and operator performance. The low profile body design, along with the low center of gravity, enhances right side visibility and comfort for the operator. The shoulder pad can be in a 24 mm range so you can increase shooting stability by adjusting the balance when lens weight changes.

*1: For the compatible lenses, please contact the manufacturer.
*2: Cannot be utilized when the camera system is UHD(4K) and HD high-speed mode is used.
*3: Adverse conditions, additional patching and longer runs will require repeater devices.
*4: For more details, please visit the following website (http://pro-av.panasonic.net/en/products/newtek_autolink/).
Camera System

AK-UCU500
Camera Control Unit (CCU)

AK-UCU500PJ/AK-UCU500EJ (Taijimi connector model)
AK-UCU500PSJ/AK-UCU500ESJ (LEMO connector model)

The same AK-UCU500 supports both the AK-UC3000 4K capable camera and the AK-HC5000 HD high speed camera, as do the other main camera accessories, so production rental companies have flexibility in preparing a camera rental or fly-pack.

Optical fiber transmission of uncompressed video signals over a distance of approx. 2,000 m between camera and CCU*1.
The compact, lightweight unit measures 2U in height and is rack-mountable.
Supported formats
UHD (3G-SDI x 4)*2: 3840×2160/59.94p, 50p, 29.97p, 25p, 23.98p, 29.97PsF, 25PsF, 23.98PsF
HD (3G-SDI): 1080/59.94p, 50p, 59.94i, 50i, 23.98p over 59.94i, 29.97PsF, 25PsF, 23.98PsF, 720/59.94p, 50p
SD: 480/59.94i, 576/50i

Supports IP streaming (100 Base-T).
SD memory card can be used for saving user files and updating firmware versions.
Input/output
SDI OUT x 7, SDI OUT (PM) x 1, VBS x 1, etc.
*4K MODE*2: SDI OUT x 4 (4K), SDI OUT x 3, SDI OUT (PM) x 1, VBS x 1, VBS (PM) x 1
RET Input (SDI: 4ch, VBS: 1ch) etc.
LAN-TRUNK (100/1000BASE-T)
PROMPT Input (SDI: 1ch, ANALOG: 2ch)

AK-HRP1000GJ
AK-HRP1005GJ
Remote Operation Panel (ROP)

Expand operation scope with two size options: a full operation panel and a simplified panel. These compact operation panels also support PoE*3 and IP control.

Rear View

AK-HRP1000GJ
AK-HRP1005GJ

Rear View

AK-HRP1000GJ
AK-HRP1005GJ

- Two models: 1/4 rack size (AK-HRP1000GJ) and 1/5 rack size (AK-HRP1005GJ).
- LCD panels with enhanced visibility.
  AK-HRP1000GJ: 8.9 cm (3.5 inches) (VGA)
  AK-HRP1005GJ: 8.1 cm (3.2 inches) (VGA)
- Camera serial control and IP control (RJ45 LAN cable) are possible.
- Supports PoE*3, which can supply power via LAN cable (CAT5e or faster).
- Functions for studio camera scene file registration and retrieval.
- Equipped with SD memory card slot for saving user files, scene file and updating firmware versions.

---

*1: When power is supplied from CCU.
*2: When connected with AK-UC3000 4K Studio Camera.
*3: Abbreviation of Power over Ethernet.
AK-HVF100GJ
22.9 cm (9 inches) LCD Color Viewfinder

Equipped with newly designed tilt mechanism and extensive functions such as focus assist and external video input.

- High-resolution 22.9 cm (9 inches) color LCD panel displays full HD 1920 x 1080 pixels
- Focus assist functions (Focus-in-Red, Focus Bar*)
- Detail depends on zoom ratio*
- External HD-SDI (3G SDI) input
- External DC input (+12 V DC)
- Four assignable function buttons
- Contrast, brightness, and peaking are adjustable
- Pan, tilt, and lift structure used

*1: When connected to AK-UC3000.

AK-MSU1000GJ
Master Setup Unit (MSU)

Controls up to 99 CCU units via IP

- IP and serial connections supported.
  - IP connection: Up to 99 units
  - Serial connection: Up to six units
- 7-inch Touch Panel LCD
  - Video monitoring function
- HD SDI Input (Monitoring) (1080i)
- Power DC12 V (DC10 V - DC17 V) or PoE+ (via PoE+ Hub)

AK-HBU500GJ
Build-up Unit

Enables use of large studio-use lens.

- Smooth camera mounting/removal possible
- Precise optical axis (horizontal/vertical) adjustment structure
- Rear control panel equivalent to that of a large camera
- DC OUT 12V 7.5 A (XLR4-pin)/DC OUT 1.5 A (4-pin)

* It may require to replace lens mount parts at using a specific 4K lens. Please contact your dealer for more details.
Other accessories

- **AJ-CVF50G**
  38.1 mm (1.5 inches) HD EVF

- **AJ-HVF21KG**
  50.8 mm (2 inches) HD EVF
  59.94 Hz/50 Hz Switchable
  Not available in some areas.

- **AG-CVF15G**
  87.6 mm (3.45 inches) Color HD EVF
  Open two ways for LCD monitor viewing

- **AG-CVF10G**
  87.6 mm (3.45 inches) Color HD EVF
  Open one way for LCD monitor viewing

- **AK-HVF70G**
  17.8 cm (7 inches) LCD Color Viewfinder

- **AJ-MC700P**
  Microphone Kit (monaural)

- **AW-PS551**
  AC Adaptor

- **AJ-C10050G**
  Remote Control Cable
  (50 m / 164 feet)

- **SHAN-TM700**
  Tripod Adapter

System Configuration

1. **AJ-MC700P**
   Microphone

2. **AJ-CVF50G/HVF21KG**
   HD EVF

3. **2/3-type 4K or HD Lens**
   *1:

4. **AK-HVF70G**
   17.8 cm (7 inches) LCD Color Viewfinder

5. **AJ-UC1000**
   Camera

6. **Optical Fiber multi Cable**
   Max. 2,000 m

7. **SD memory card**

8. **Serial**

9. **AJ-10050G**
   Remote Control Cable

10. **Camera Control Unit**
    Master Setup Unit

*1: For software supporting Chromatic Aberration Compensation (CAC) file, please download from “Software download” on Panasonic website: http://pro-av.panasonic.net/en/

*2: A power cable is included with the AC Adaptor.

*3: Not available in some areas.

*4: With the use of a serial remote control cable AJ-C10050G, power for ROP is supplied from a CCU.

*5: When AK-MSU1000 is connected to AK-UCU500 via serial cable, AJ-PS551 or PoE+ HUB is required.

*6: It may require to replace lens mount parts at using a specific 4K lens. Please contact your dealer for more details.
## Specifications

### Power Supply
- DC 12 V (when using an external power supply)
- AC 240 V, 50 Hz/60 Hz (when AK-UCU500P/AK-UCU500PS/AK-UCU500E/AK-UCU500ES is connected)

### Power Consumption
- 119 W (maximum, when connecting to an external 12 V and including supply to an externally connected devices)
- 360 W (maximum, when AK-UCU500P/AK-UCU500PS/AK-UCU500E/AK-UCU500ES is connected and including supply to an externally connected devices)

### 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)

### Operating Humidity
- 85% or less (relative humidity)

### Weight
- Approx. 4.4 kg (9.70 lbs.) (body only, excluding the accessories)

### Dimensions (W x H x D)
- Body only 151 mm x 267 mm x 371.5 mm (5-31/32 inches x 10-17/32 inches x 14-21/32 inches) (excluding protrusions)

### Pickup Device
- 11 million pixels, CMOS x 1

### Optical Filter
- CC: 3200 K, 4300 K, 6300 K, Cross, Diffusion
- ND: CAP, 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 Resolution
- 4K: 1800 TV lines or above (center, AK-UCU500P/AK-UCU500PS/AK-UCU500E/AK-UCU500ES output)
- HD: 1000 TV lines or above (center)

### S/N
- 60 dB or above

### Horizontal Modulation
- 50% or above (27.5 MHz)

### 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
- [9.99] mode: 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000
- [9.99] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000
- [9.99] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/120, 1/125, 1/250, 1/500, 1/1000, 1/2000
- [9.99] mode: 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000
- [9.99] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000
- [9.99] mode: 1/48, 1/50, 1/60, 1/96, 1/100, 1/125, 1/250, 1/500, 1/1000, 1/2000

### <HD SDI1> terminal
- BNC x 1
- HD (3G/1.5G): 0.8 V [p-p], 75 Ω

### <HD SDI2> terminal
- BNC x 1
- HD (3G/1.5G): 0.8 V [p-p], 75 Ω

### <AUX> terminal
- BNC x 1
- Functions as <HD TRUNK> terminal/<PROMPTER2> terminal by switching the setting in the menu
- <HD TRUNK>: HD (1.5G)
- <PROMPTER2>: VBS signal 1 V [p-p], 75 Ω

### <G/L IN/PROMPTER OUT> terminal
- BNC x 1
- Functions as <G/L IN> when standalone, and as <PROMPTER OUT> when AK-UCU500P/AK-UCU500PS/AK-UCU500E/AK-UCU500ES is connected

### <MIC> terminal
- XLR x 1, 3-pin
- [LINE]<MIC><-48 V switchable For <MIC>, <FRONT><-REAR> switchable
- [LINE]: –60 dBu, –40 dBu menu selection available
- [MIC]: –60 dBu, –40 dBu, or –20 dBu menu can be selected

### Rear View

- XLR x 1, 3-pin
- [LINE]<MIC><-48 V 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 1> terminal
- XLR x 1, 3-pin
- [LINE]<MIC><-48 V 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 2> terminal
- XLR x 1, 3-pin
- [LINE]<MIC><-48 V 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

### <INTERCOM1> terminal
- XLR x 1, 5-pin

### <INTERCOM2> terminal
- XLR x 1, 5-pin

### <EARPHONE> terminal
- Stereo mini jack x 1, 3-pin

### <OPT FIBER> terminal
- Optical composite connector x 1

### <LENS> terminal
- 12-pin x 1

### <VF> terminal
- 20-pin x 1

### <VF> terminal (rear)
- 29-pin x 1

### <DC IN> terminal
- XLR x 1, 4-pin, DC 12 V

### <DC OUT 12 V 1 A> terminal
- 4-pin x 1

### <RET CTRL> terminal
- 6-pin x 1

### <EXT I/O> terminal
- 20-pin x 1, DC 12 V, 0.5 A

### <REMOTE> terminal
- 10-pin x 1

### <TRUNK> terminal
- 12-pin x

### <DC OUT 12 V 2.5 A> terminal
- 2-pin x 1

### <<LAN>> terminal
- RJ-45 x 1

### <USB2.0> terminal (host)
- Type A connector, DC 5 V, 0.5 A

### Build-up terminal
- 20-pin x 1
AK-UCU500PJ/UCU500EJ/UCU500PSJ/UCU500EJ

Power Supply
AK-UCU500PJ/UCU500EJ: 100 V - 160 V AC, 50 Hz/60 Hz
AK-UCU500PSJ/UCU500EJ: 200 V - 240 V AC, 50 Hz/60 Hz

Power Consumption
5 W (4 W on PoE)

Capacity for Supplying Power to a Camera
240 V AC (tolerance: ±5%, 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)

Weight
Approx. 8.8 kg (19.4 lb)

Dimensions (W x H x D)
424 mm x 88 mm x 401 mm (excluding protrusions)

Video Output
3G-HD/HD/SD-SDI: 4 lines (RET1 input has active-through output)

HD TRUNK Output
HD-SDI: 1 line (cannot be used in UHD/HS mode)

Return Input
3G-HD/SDI: 4 lines (RET output has active-through output)

Promoter Input
HD-SDI: 1 line (with active-through output)

Reference Input
BB (black burst) / tri-level*: 1 line (automatic termination, connect to upper connector; BB signal and tri-level signal automatically recognized, with loop-through output)

Microphone Output
0 dBm (0 dBm, 600 Ω (2 lines)

Communication
Intercom input/output (ENG / PROD, 0 dBm, 600 Ω / RTS / CLRCOM) : 2 lines

AUX
WFM control
6-bit (open collector output, terminal shared with camera microphone gain setting*)
Camera microphone gain setting input
5-bit (photo-coupler input, terminal shared with WFM control*)
Down-conversion system setting input 2-bit (photo-coupler input)

FRONT ROP
RS-422 J, RS-232C

REAR ROP
RS-422

LAN TRUNK
LAN connection with camera side via an optical cable**: 1 line, 100BASE-T, 1000BASE-T

LAN
Personal computer connection for distribution via the Web**: 1 line, 10BASE-T, 100BASE-TX (use a crossover cable when connecting directly with a personal computer)

AK-HRV1005GJ

Power Supply
12 V DC

Power Consumption
165 W (when AK-UCU500 is connected)

Power Supply
12 V DC (when external power is supplied)
240 V AC 50 Hz/60 Hz (when AK-UCU500 is connected)

Power Consumption
70 W (when external power is supplied)
165 W (when AK-UCU500 is connected)

Operating Temperature
-10°C to 45°C (14°F to 113°F)

Operating Humidity Range
85% or less (relative humidity)

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

Weight
Approx. 12.8 kg (28.2 lbs)

Dimensions (W x H x D)
340 mm x 234 mm x 193 mm (excluding hood)
330 mm x 417 mm x 510 mm (including mounting brackets and dial heights)

Camera Number Display
1 to 15 (depending on system settings)

Lens IF Connector
36-pin x 1

Camera IF Connector
20-pin x 1

DC IN Connector
XLR 1, 4-pin, 12 V DC

DC OUT 12 V 7.5 A Connector
4-pin x 1

Supported Signal Format
SDI: 1080/59.94i, 1080/50p, 1080/59.94i, 1080/50i, 720/59.94i, 720/50p

*1: Depending on the setting, only one of them can be selected at one time.
*2: The BB (black burst) signal and tri-level sync signal of the reference input are recognized automatically.
*3: IP video cannot be transmitted when [CCU MODE] is set to [2160/23.98p], [2160/23.98i/PF], [1080/23.98p], or [1080/23.98i/PF].
*4: Can be provided from CCU

AK-M500GJ

Power Supply
12 V DC (Power supply from camera)
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 113°F)

Humidity
90% or less

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

Weight
Approx. 4.0 kg (8.8 lb)

Dimensions (W x H x D)
482 mm x 222 mm x 81.5 mm (18-1/32 inches x 8-3/16 inches x 3-7/16 inches)

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
RS-422 or IP

Maximum Cable Length
When CCU connected: 100 m (328 ft)

AK-MSU1000GJ

Power Supply
AK-M500GJ

Power Consumption
18 W

Operation Temperature
0°C to 45°C (32°F to 113°F)

Operating Humidity
90% or less (no condensation)

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

Weight
Approx. 2.6 kg (5.7 lbs) (not including hood) / Approx. 3.0 kg (6.6 lbs) (including hood)

Dimensions (W x H x D)
340 mm x 234 mm x 211 mm (13-13/32 inches x 9-7/32 inches x 8-1/8 inches)
340 mm x 234 mm x 231 mm (13-13/32 inches x 9-7/32 inches x 9-1/8 inches)

Display Panel
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

Connector
Camera IF 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, 1080/59.94p, 1080/50p, 1080/59.94, 1080/50, 720/59.94p, 720/50p

AK-HBU500GJ

Power Supply
12 V DC (when external power is supplied)
240 V AC 50 Hz/60 Hz (when AK-UCU500 is connected)

Power Consumption
70 W (when external power is supplied)
165 W (when AK-UCU500 is connected)

Operating Temperature
-10°C to 45°C (14°F to 113°F)

Operating Humidity Range
85% or less (relative humidity)

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

Weight
Approx. 12.8 kg (28.2 lbs) (unit only)

Dimensions (W x H x D)
300 mm x 417 mm x 510 mm (12-3/16 inches x 20-1/16 inches x 20-3/16 inches)

Camera Number Display
1 to 15 (depending on system settings)

Lens IF Connector
36-pin x 1

Camera IF Connector
20-pin x 1

DC IN Connector
XLR 1, 4-pin, 12 V DC

DC OUT 12 V 7.5 A Connector
4-pin x 1

Supported Signal Format
CAM: 1080/59.94i, 1080/50i, 1080/59.94p, 1080/50p, 1080/59.94, 1080/50, 720/59.94p, 720/50p

*1: Depending on the setting, only one of them can be selected at one time.
*2: The BB (black burst) signal and tri-level sync signal of the reference input are recognized automatically.
*3: IP video cannot be transmitted when [CCU MODE] is set to [2160/23.98p], [2160/23.98i/PF], [1080/23.98p], or [1080/23.98i/PF].
*4: Can be provided from CCU
Dimensions
As of April, 2017
Unit: mm(inches)

For AK-UC3000GJ/UC3000GSJ

For AK-UCU500PJ/EJ/PSJ/ESJ

For AK-MSU1000GJ

For AK-HBU500GJ

For AK-HVF100GJ
Factories of AVC Networks Company have received ISO 14001:2004 Environmental Management System certification. (Except for 3rd party’s peripherals.)