Compact and light
4K Multi Purpose Camera

* Lens sold separately
4K Multi Purpose Camera with UHD/HD Simultaneous Output and 2/3 type lens mount

This 4K multipurpose camera shows its potential in a wide range of situations, from live sports and other event broadcasting to studio recording and aerial shooting. Two sensitivity modes (high sensitivity and normal) can be selected according to the shooting environment. The usability has also greatly improved through haze reduction technology and transmission with a single cable operation is possible when the 12G Output Board is replaced with 3G TICO UHD Output Board. This camera comes standard with the HDR (High Dynamic Range) function that is equipped on Panasonic Studio Cameras. Our original HDR adjustment function makes possible video expression with a higher level of realism. Additionally, AK-UB300GJ is also equipped with the focus assist function as well as an HD cropping function from 4K video. It can also perform HD-IP streaming output and IP control so the system can be centrally managed with Studio Camera AK and Integrated Camera AW series, enabling flexible and expandable utilization.

### 4K Optical System

The 4K large format sensor can use 2/3 type lens without an adapter, and the conversion lens designed for large format sensor realizes the excellent video quality. Its new optical system makes maximum use of incident light to achieve the wide dynamic range.

### UHD/HD Simultaneous Output

Supports simultaneous UHD/HD output, which enables to select the video output according to the application. Following formats are supported.

<table>
<thead>
<tr>
<th>Supported formats</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>UHD</strong></td>
</tr>
<tr>
<td>3840 x 2160/60p, 3840 x 2160/29.97p, 3840 x 2160/23.98p, 3840 x 2160/23.98PsF, 3840 x 2160/50p, 3840 x 2160/25p, 3840 x 2160/25PsF</td>
</tr>
<tr>
<td><strong>UHD_CROP</strong></td>
</tr>
<tr>
<td>1080/59.94p_CROP, 1080/59.94i_CROP, 1080/50p_CROP, 1080/50i_CROP</td>
</tr>
<tr>
<td><strong>HD</strong></td>
</tr>
<tr>
<td>1080/60p, 1080/59.94p, 1080/59.94i, 1080/29.97PsF, 1080/23.98PsF, 1080/23.98p, 1080/50p, 1080/50i, 1080/25PsF, 720/60p, 720/59.94p, 720/59.94i</td>
</tr>
</tbody>
</table>

### Cropping Function

In addition to capturing the entire scene, up to three specified areas in the scene can be cropped and displayed. The area specified can be instantly switched using the controller.

* Images are simulated.

### Haze Reduction Function

For installations in places where haze tends to occur, this function performs correction for a subject with low contrast to make the image clearer. Three settings can be selected for the compensation level.

* Images are simulated.
Flash Band Compensation*1
Using a high-precision flash band detection and compensation function for the camera signal processing LSI, enables elimination of the flash band phenomenon (light and dark areas appearing in the same frame) that occurs when a flash goes off during shooting.

Images of flash band compensation

Wide Range of Color Correction Functions
Color saturation and hue can be finely adjusted individually by 12-axis color correction and linear matrix. Moreover, an independent skin color adjustment function (SKIN CORRECTION) enables fine color expression.

Dynamic Range Stretch (DRS) Function*1
The DRS function automatically suppresses blocked shadows and blown highlights. When dark and bright areas are present 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. This minimizes blocked shadows, blown highlights, and washed out colors. As a result, it is possible to obtain in real time video with a visually wide dynamic range.

Images showing DRS (Dynamic Range Stretch) effect

HDR Video Adjustment Functions
Using the HDR video knee and black gamma functions, it is now possible to adjust contrast from dark areas to highlights. In addition to UHD HDR/SDR output selection, HD HDR/SDR simultaneous output is possible. Simultaneous operation is also supported.

Intelligent Automatic Adjustment Function

•Auto Tracking White Balance Function
This function automatically adjusts the white balance as the color temperature gradually changes when shooting outdoors. Images can be automatically adjusted according to the subject or time of day.

Automatic Gain Control (AGC)
In addition to automatic iris control, continuous automatic variable gain control (-6 dB to 36 dB) is also possible. In addition to normal mode, modes with priority on movement (SPORTS mode) and image quality (SN mode) can also be selected.

Scan Reverse Shooting
Image can be displayed reversed vertically or horizontally by setting this mode.

Linkage with NewTek AutoLink for Panasonic PTZ Software
*NewTek AutoLink for Panasonic PTZ*2, can be downloaded from the website to allow Panasonic professional cameras equipped with IP streaming to be automatically detected on the network from a NewTek TriCaster® or IP series Video Mix Engine produced by NewTek, Inc., enabling direct use of IP streaming from cameras.

*1: Cannot be utilized when the camera system is in UHD or UHD CRP mode.
*2: For details, see the Panasonic website (https://pro-av.panasonic.net/en/products/newtek_autolink/).
System Configuration

One camera and one controller

Multiple cameras from a single controller

As of January, 2019

Optional Products

Indoor pan-tilt head suitable for production work requiring quiet and fast revolution.

Pan-Tilt Head

AW-PH400

Example of system configuration with AW-PH400 Pan-Tilt Head connected

Option Boards

12G Output Board
AK-UHD12G

3G TICO UHD Output Board
AK-UTS03G

3G TICO & 12G to Quad 3G SDI Converter
AK-UGB01G

Video signals
Control signals

Video signals
Control signals

Rear Panel

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*1: 60 W or more is recommended.
*2: Camera control and cropping are available.

* Some functions are restricted when AW-PH400 Pan-Tilt Head is connected. * When using AW-PH400 with AK-UB300GJ, please contact your regional dealer.
### Specifications

**AK-UB300GJ**

**General**

- **Power**: DC12 V (DC11 V – 17 V)
- **Power Consumption**: 40 W (body only, when 3G SDI x 4 is output)
- **Dimensions**
  - 215 mm x 40 mm x 230 mm (excluding protrusions)
- **Weight**: Approx. 1.4 kg (3.1 lbs.)

- **Ambient Operating Temperature**: −10 °C to 45 °C (14 °F to 113 °F)
- **Storage Temperature**: −20 °C to 60 °C (−4 °F to 140 °F)
- **Ambient Operating Humidity**: 85% or less (relative humidity)

- **Video Input/Output**
  - **<UHD SDI OUT 1> Terminal**: BNC x 1
  - **<UHD SDI OUT 2> Terminal**: BNC x 1
  - **<UHD SDI OUT 3> Terminal**: BNC x 1
  - **<UHD SDI OUT 4> Terminal**: BNC x 1

- **Shutter Speed**
  - [23.98p] mode: 1/24.7 to 1/2880 seconds
  - [29.97p] mode: 1/25.7 to 1/2310 seconds
  - [30p] mode: 1/25.7 to 1/2310 seconds

- **Synchro Scan Shutter**
  - Selectable from 6, 12, 15, 18, 21, 24 dB

- **Gain**
  - F9.5 (2000 lx, 3200 K, 89.9% reflection, 1080/59.94i/F4)
  - F11 (2000 lx, 3200 K, 89.9% reflection, 1080/59.94i/F1)

- **System Format**
  - **3840 x 2160/60p, 3840 x 2160/59.94p, 3840 x 2160/29.97p, 3840 x 2160/23.98PsF, 3840 x 2160/25p, 3840 x 2160/25PsF**
  - **1080/60p, 1080/59.94p, 1080/59.94i, 1080/29.97PsF, 1080/23.98PsF, 1080/25p, 1080/25PsF**

- **Video Input/Output**
  - **<UHD/HD SDI OUT 1> Terminal**: 3G/1.5G SDI: 0.8 V [p-p], 75 Ω
  - **<UHD/HD SDI OUT 2> Terminal**: 3G/1.5G SDI: 0.8 V [p-p], 75 Ω
  - **<UHD/HD SDI OUT 3> Terminal**: 3G/1.5G SDI: 0.8 V [p-p], 75 Ω
  - **<UHD/HD SDI OUT 4> Terminal**: 3G/1.5G SDI: 0.8 V [p-p], 75 Ω

- **<DC IN> Terminal**: 12-pin x 1
- **<I/F> Terminal**: D-SUB x 1, 15-pin
- **<ZOOM/FOCUS> Terminal**: 12-pin x 1
- **<LAN> Terminal**: 100BASE-TX/10BASE-T
- **<DC IN> Terminal**: XLR x 1, 4-pin, DC12 V (DC11 V – 17 V)

- **Supported Format**
  - **<UHD SDI OUT 1> Terminal**: BNC x 1
  - **<UHD SDI OUT 2> Terminal**: BNC x 1
  - **<UHD SDI OUT 3> Terminal**: BNC x 1
  - **<UHD SDI OUT 4> Terminal**: BNC x 1

### Optional Products

**Remote Camera Controller**

- **AW-RP50**

**Remote Operation Panel (ROP)**

- **AK-HRP200G**
  - **Remote Operation Panel (ROP)**
    - **AK-HRP1000GJ**
    - **AK-HRP1005GJ**

**Protocol Converter**

- **AW-IF400G**

**Cable for Indoor Pan-tilt Head Connection**

- **AW-CA15H29G**
Rear Panel

Dimensions

[Unit: mm (inches)]

(Front)

(Side)

(Top)

(Bottom)

* Specifications are subject to change without notice.