Panasonic

AW-HE130W/K
HD Integrated Camera

For indoor use

Production Quality HD Video via 3G-SDI and IP Streaming
Full HD Camera with Integrated Pan-Tilt Provides Video Output via 3G-SDI or IP Streaming Transmission for an Expanded Range of Applications

Introducing a new PTZ camera capable Production Quality Full HD video output up to 1080/60p via IP transmission, in addition to 3G-SDI and HDMI.

Equipped with three newly developed 1/2.86 MOS sensors for high sensitivity, a superior S/N ratio and high resolution.

The AW-HE130W/K also supports PoE+, so the camera only needs one LAN cable for its power supply, control and video output.

Presenting the new standard in versatile, high-quality remote production with 3G-SDI, IP-Streaming, and POE+.

*Abbreviation of Power over Ethernet Plus.*
A Single Cable Solution for Remote Video and Audio Capture

Full HD video output via IP transmission
In addition to 3G-SDI and HDMI output, production quality full HD video output via IP transmission is supported with the AW-HE130W/K. The camera delivers up to four channels of IP streaming video (H.264), with a maximum quality level of 1080/60p at 24 Mbps. Simultaneous transmission to as many as 14 devices is also supported. Flexible system setup is possible to meet various application needs.

Transmit IP video without a separate encoder reduces cost and simplifies installation
There is no need for the separate encoder normally required when streaming video and audio via IP. Systems can be built with exceptional cost/performance benefits.

Supporting POE+ for lower installation cost
By connecting to network devices that support the IEEE 802.3at POE+ standard, power can be supplied via LAN cable. Since it is not necessary to install a power supply or even a local A.C. outlet, installation costs can be significantly reduced.

IP control with image monitoring using PC, Mac and mobile terminals
Using an IP browser, such as Internet Explorer or Safari, it is possible to set up and control the camera from a remote location. This feature simplifies the management of cameras around a campus, or across a worldwide enterprise network. IP video monitoring and remote camera control can also be performed from mobile terminals such as an iPhone, iPad or Android device.

Flexible IP Control Architecture Simplifies System Design and Operation
Up to 100 x AW-HE130W/K cameras can be controlled via IP from a single AW-RP120G, AW-RP50, or PC. An AW-HE130W/K can also be simultaneously controlled by up to five AW-RP120G or AW-RP50’s via IP. AK-HRP200G can be used for precise color adjustment.

List of Supported Multi-streaming Outputs

<table>
<thead>
<tr>
<th>Settings</th>
<th>H.264</th>
<th>JPEG</th>
</tr>
</thead>
<tbody>
<tr>
<td>CH1/CH2/CH3</td>
<td>1920x1080/1280x720</td>
<td>1920x1080/1280x720/640x360/320x180/160x90</td>
</tr>
<tr>
<td>CH1/CH2/CH3</td>
<td>1280x720/640x360/320x180/160x90</td>
<td>1280x720/640x360/320x180/160x90</td>
</tr>
</tbody>
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- Frame rate
  - 60 Hz: 60 fps
  - 50 Hz: 50 fps

- Bit rate
  - Up to 24 Mbps

- Voice transmission
  - Yes (AAC48 kHz)

- Power over Ethernet (PoE+)
  - Yes

*For the latest information on supported OS/browser, please refer to the "service and support" on the Panasonic website (http://pro-av.panasonic.net).

*1: 1920 x 1080 60 fps output is 1ch display only. For 2ch or more, display is max. 30 fps. Also, JPEG output is up to 3ch.

*2: The number varies depending on distribution settings or network environment. Only one Android™ device can be connected to one camera.

*3: Abbreviation of Power over Ethernet Plus.

*4: Controller upgrade required. For details, please refer to the "service and support" on the Panasonic website (http://pro-av.panasonic.net).
Advanced Video Processing for High Quality Video Image.

Three newly developed 1/2.86-type MOS sensors for high-level video capture and production.

Equipped with three newly developed 1/2.86-type full HD MOS sensors and DSP (Digital Signal Processor), AW-HE130W/K achieves high sensitivity, a high S/N ratio and high resolution through the use of advanced video processing.

Optical Image Stabilizer and Digital Extender for capturing clear images at any distance.

**Optical Image Stabilization System (OIS)**
Automatically minimizes the effect of small vibrations from the surface where the camera is mounted caused by; whether this is caused by the opening and closing of doors, nearby speakers, or other disturbances.

**High Performance 20x Zoom Lens/1.4x Digital Extender Zoom**
In addition to a sharp, fast F1.6, 20x optical zoom lens, the AW-HE130W/K is equipped with an innovative 1.4x digital extender that can increase the effective focal length of the lens by 40% while delivering smooth, high resolution video.

Dynamic Range Stretch (DRS) / Hybrid Digital Noise Reduction (Hybrid DNR)
Black defects, halation and washed-out colors are minimized for video images with a visually broad dynamic range (DRS). In addition, with Hybrid Digital Noise Reduction (Hybrid DNR), two types of noise reduction, 2D and 3D, are used together to enable clear video capture under a wide range of lighting conditions, with minimal after-image blurring or image degradation.

Equipped with Night Mode for infrared shooting
The AW-HE130W/K can deliver high-quality monochrome video in total darkness, when the camera’s Night Mode is used in conjunction with an optional IR illuminator.

Freeze During Preset function
The new Freeze During Preset function may be enabled to freeze the video during preset playback. The immediately preceding still image is output during preset movements so that the swiveling movement is not displayed, making operations possible with one camera.

Supports multiple formats for flexible output
In addition to typically supported formats, the camera supports output formats required for specialized applications, including 1080/29.97p, 1080/25p, 1080/23.98p. Remote control video capture can now be more easily performed for specialized applications such as teleproduction, and scientific research.

Audio input function
The AW-HE130W/K also supports audio input, embedding, and encoding. The input from the camera’s switchable mic/line input can be combined with the HD-SDI, HDMI, and streaming outputs for mixing, recording or transmission.

Excellent quietness
Thanks to its fan-less design and advanced pan-tilt mechanism, the AW-HE130W/K is very quiet and greatly reducing audio noise during video capture.
Exceptional Pan-Tilt mechanism performance for smooth moves during video capture.

Thanks to a highly evolved pan-tilt design, the AW-HE130W/K achieves smoother and more natural movement during on-air shots. The pan-tilt head also has a wide shooting range*, with a pan range of ±175° and a tilt range of -30° to 210°. The newly developed pan-tilt drive provides high-speed operation at maximum 60°/s, excellent response to remote control operation, and highly precise stop control. These features combine to accurately capture fast-action sports scenes or smooth concert footage. The noise level during operation is also very low, at NC35 or less, which is ideal for use in quiet environments.

* Depending on the position of the pan and tilt, its own unit may be reflected in the image.

**Objectives and Specifications**

- **Power requirements**: DC 12 V (AC adaptor supplied), DC 42 - 57 V (PoE+ power supply)
- **Current consumption**: 1.8 A (AC adaptor supplied), 0.6 A (PoE+ power supply)
- **Ambient operating temperature**: 0°C to 40°C (32°F to 104°F)
- **Storage temperature**: -20°C to 50°C (-4°F to 122°F)
- **Mass**: Approx. 3.1 kg (6.8 lb) (including mount bracket)
- **Dimensions (W x H x D)**: 180 mm x 228 mm x 234 mm (7-3/32 inches x 9 inches x 9-3/16 inches)
- **Finish**: AW-HE130WP/AW-HE130WE: Pearl white
- **AW-HE130WP/AW-HE130KE: Metallic black
- **Controller supported**: AW-RP120, AW-RP30, AK-HPW200

**Output Configuration Example**

- **HD Integrated Camera**: AW-HE130W/K
- **Remote Camera Controller**: AW-HS50R
- **Compact Live Switcher**: CS50
- **Switching Hub**: RP connecting Cable
- **PoE+ Hub**: AW-RP120G
- **LAN cable (straight cable)**
- **AC adapter/External DC Power Supply**

**Specifications**

- **Input connectors**
  - **HDMI connector**: supports HDMI 1.4c, HDR10, and bandwidth up to 20 Gbps
  - **LAN connector**: 10/100/1000BASE-T (POE+), 2.5G/5G/10G BASE-X

- **Output connectors**
  - **SDI video**: supports SMPTE 292M, 424M, and 259M
  - **HDMI connector**: supports 4K, HDR10, and bandwidth up to 20 Gbps

- **Gain selection**: Auto, 0 dB to 36 dB
- **Frame mix**: 0 dB, 6 dB, 12 dB, 18 dB, 24 dB
- **Electronic shutter speed**: 1/1000, 1/2000, 1/4000, 1/10000
- **Chroma amount variability**: OFF, -40 % to 200 %
- **White balance**: Auto, A, B, C, D, E

- **Pan-tilt operation speed**: 0.08°/s to 60°/s
- **Pan range**: ±175°
- **Tilting range**: -30° to 210°
- **Quietness**: NC35 or less

**Other Functions**

- **Equipped with ND filters**: (Through, 1/8, 1/64).
- **Equipped with four types of scene files**: that can be set by the user.
- **Preset memory**: of up to 100 positions.
- **Functions such as freeze during preset, digital extender zoom, color temperature settings**: can be assigned to the user buttons on Panasonic controllers.
- **Equipped with RS422 remote terminal**: up to five units can be controlled via serial control from a controller.
- **Equipped with RS232C remote terminal**: (Standard serial communication support).
- **Up to four units can be operated with a wireless remote controller**: (AW-RM50G sold separately).
- **Easy installation thanks to use of turn-lock mechanism**.
- **Color variations**: (black/white) that can be chosen for different applications or conditions.

**Technical Details**

- **Imaging sensors**: 1/2.86-type Full-HD 3MOS
- **Lens**: Motorized 20 zoom, F1.6 to F3.4
- **Focus**: Switching between auto and manual
- **Focus distance**: 50 mm to 1200 mm
- **Color separation optical system**: 3MOS
- **Minimum illumination**: 0.5 lx (F1.6, 3200K)
- **Horizontal resolution**: 1000 TV Lines (Center area)
- **Gain selection**: Auto, 0 dB to 36 dB
- **Frame mix**: 0 dB, 6 dB, 12 dB, 18 dB, 24 dB
- **Electronic shutter speed**: 1/1000, 1/2000, 1/4000, 1/10000
- **Chroma amount variability**: OFF, -40 % to 200 %
- **White balance**: Auto, A, B, C, D, E
- **Pan-tilt operation speed**: 0.08°/s to 60°/s
- **Pan range**: ±175°
- **Tilting range**: -30° to 210°
- **Quietness**: NC35 or less
Computer requirements

CPU
Intel® Core™ 2 DUO 2.4 GHz or more

Memory
For Windows: 1 GB or more (2 GB or more for 64-bit editions of Microsoft® Windows® 8, 8.1, Microsoft® Windows® 7, and Microsoft® Windows® 7)
For Mac: 2 GB or more

Network function
10BASE-T or 100BASE-TX port x 1

Image display
Resolution: 1024 x 768 pixels or more  Color generation: True Color 24-bit or more

Supported operating systems and web browsers
Microsoft® Windows® 7 Professional SP1 64-bit / 32-bit
Windows® Internet Explorer® 10.0*1 *3
Windows® Internet Explorer® 11.0*1 *3

*1 Use the desktop version of Internet Explorer. (Internet Explorer for Windows UI is not supported.)
*2 Windows® XP compatibility mode is not supported.
*3 The 64-bit version of Internet Explorer® is not supported.

For Android
Android OS 7.0 (API 24)
Standard web browsers

System Camera Option

Remote Camera Controller
AW-RP50
Remote Camera Controller
AW-RP120G
(AC adaptor(DC12 V) is required separately.)

Remote Operation Panel
AK-HRP200G

Wireless Remote Controller
AW-RM50G
("AA", "R6" or "LR6" battery x 2 are not included.)

Compact Live Switcher
AW-HS50

Direct Ceiling Mount Bracket
WV-Q105A

Standard Accessories

- Mount bracket for installation surface (Hanging / Desktop)
- Drop-prevention wire
- Drop-prevention wire mounting screw (comes attached to the unit)
- Bracket mounting screws (bind-head) M4 x 10 mm
- Main unit mounting screw (with flat washer, spring washer) M3 x 6 mm
- Cable cover
- Power cable
- CD-ROM
- AC adaptor

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[Service and Support]

For the latest information on supported OS / browser, please refer to the "service and support" on the Panasonic website (http://pro-av.panasonic.net).

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