Panasonic

AW-HE130W/K

HD Integrated PTZ Camera

For indoor use

Production Quality HD Video via 3G-SDI and IP Streaming
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.

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.

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.

Advanced color adjustment capabilities for precision imaging

Independent Color Correction Function with 12 Color Axes + 3 Skin Tone Axes
In addition to the conventional 12 axes, three additional axes have been added for the skin tone area. This makes it possible to reproduce skin tones with greater precision.

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.

*1: Native output. *2: OVER 59.94i. *3: Your monitor may recognize the signal as 59.94i. *4: Your monitor may recognize the signal as 50i. *5: A 'P' signal is output as HDMI output, an 'I' signal is output as SDI and an analog output for output formats of 480/59.94p(i) and 576/50p(i).
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.

NDI|HX Compatibility for Excellent Video Streaming Quality

The AW-HE130W/K can be upgraded to an NDI|HX compatible model if purchasing a license from the NewTek website (https://pro-av.panasonic.net/en/ndihx_support/index.html). Highly efficient NDI|HX compatibility enables excellent broadcast streaming by encoding and transmitting high-quality video in real time. This technology eliminates the need for IP decoders, allowing input to be sent directly to the switcher.

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.

Table of Supported Multi-streaming Outputs

<table>
<thead>
<tr>
<th>Settings</th>
<th>CH1</th>
<th>CH2</th>
<th>CH3/CH4</th>
<th>CH1/CH2/CH3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Resolution</td>
<td>1920x1080/ 1280x720</td>
<td>1920x1080/ 1280x720/640/360/240</td>
<td>1920x1080/ 1280x720/640/360/240</td>
<td>1920x1080/ 1280x720/640/360/240</td>
</tr>
<tr>
<td>Frame rate</td>
<td>60 Hz</td>
<td>60 fps</td>
<td>5 fps/15 fps/30 fps</td>
<td>5 fps/15 fps/30 fps</td>
</tr>
<tr>
<td></td>
<td>50 Hz</td>
<td>50 fps</td>
<td>5 fps/12.5 fps/25 fps</td>
<td>5 fps/12.5 fps/25 fps</td>
</tr>
<tr>
<td>Bit rate</td>
<td>Up to 24 Mbps</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Voice transmission</td>
<td>Yes (AAC48 kHz)</td>
<td>Yes</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* Contact your local Panasonic vendor for further information.

System Configuration

Diagram Example

Table of Broadcast Streaming Quality

<table>
<thead>
<tr>
<th>Resolution</th>
<th>Frame rate</th>
<th>Bit rate</th>
<th>Voice transmission</th>
</tr>
</thead>
<tbody>
<tr>
<td>1920x1080/1280x720</td>
<td>60 Hz</td>
<td>up to 24 Mbps</td>
<td>Yes  (AAC48 kHz)</td>
</tr>
<tr>
<td>1280x720/640x360/320x180</td>
<td>50 Hz</td>
<td>1 fps/2 fps/3 fps</td>
<td>Yes</td>
</tr>
<tr>
<td>640x360/320x180/160x90</td>
<td>50 Hz</td>
<td>1 fps/2 fps/3 fps</td>
<td>Yes</td>
</tr>
</tbody>
</table>

*1: Power over Ethernet Plus, IEEE 802.3at
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.

System configuration example

<table>
<thead>
<tr>
<th>Device</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>HD Integrated Camera AW-HE130W/K</td>
<td>SDI video signal</td>
</tr>
<tr>
<td>HD Integrated Camera AW-HE130W/K</td>
<td>Studio SDI video signal</td>
</tr>
<tr>
<td>Compact Live Switcher AW-HS50</td>
<td>Monitor1 Monitor2</td>
</tr>
<tr>
<td>Monitor1 Monitor2</td>
<td>PoE+Hub Switching Hub</td>
</tr>
<tr>
<td>PoE+Hub Switching Hub</td>
<td>LAN cable (straight cable)</td>
</tr>
<tr>
<td>LAN cable (straight cable)</td>
<td>Remote Camera Controller AW-RP120G</td>
</tr>
</tbody>
</table>

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.

Supporting Lecture Capture with Auto Tracking function

Auto Tracking Software Key

AW-SF100/AW-SF200
2 Additional Licenses AW-SF202
3 Additional Licenses AW-SF203

A 30-day Free Trial is Available

AW-SF200 Main View

Optional Software

Supporting Lecture Capture with Auto Tracking function

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Optional Software
Specifications

**Gain selection**
- Auto, 0 dB to 36 dB

**Frame size**
- 0 dB, 6 dB, 12 dB, 18 dB, 24 dB

**Electronics shutter speed**
- 1/1000, 1/2000, 1/4000, 1/10000

**Electronic shutter speed**
- 23.99p: 1/24, 1/16, 1/120, 1/250, 1/500, 1/1000
- 25p: 1/25, 1/120, 1/250, 1/500, 1/1000

**Color generation**
- True Color 24-bit or more

**Network function**
- Internal/External synchronization (BBS/Tri-level sync)

**Image display**
- 1024 x 768 pixels or more

**Color generation**
- True Color 24-bit or more

**Supported operating systems and web browsers**
- Microsoft® Windows®, 8.1 Pro 64-bit / 32-bit
- Windows® Internet Explorer® 10.0

**Camera/pan-tilt head control**
- IP connecting cable
  - When connecting through a hub: LAN cable® category 5e or above, crossover cable max. 100 m (328 ft)
  - When a hub is not used: LAN cable® category 5e or above, crossover cable max. 100 m (328 ft)

**Panasonic website**
- https://pro-av.panasonic.net

**For the latest information on supported OS/browser, please refer to the “service and support” on the Panasonic website:**

*1: It may be necessary to upgrade the version of the controller in order to support the unit. For details on upgrading, visit the support page on the following website: https://pro-av.panasonic.net
*2: This cannot be configured when the format is 1080/25p, 1080/50PsF, 1080/50i, 1080/25p, 1080/50P, 1080/50PsF, 1080/25PsF, 720/50PsF, 720/50P.
*3: Native output. *4: OVER 59.94i. *5: When a hub is not used
*6: IP connecting cable
*7: BBS (Black Burst Sync), tri-level sync supported
*8: To ensure safety, the unit must be secured using the mount bracket supplied.
*9: Use of an STP (shielded twisted pair) cable is recommended. *10: Depending on the pan or tilt position, the camera may be reflected in the image.

**Computer requirements**

- **CPU** Intel® Core™ 2 Duo 2.4 GHz or more
- **Memory**
  - For Windows: 1 GB or more
  - For Mac: 2 GB or more

**Supported operating systems and web browsers**
- Microsoft® Windows®, 8.1 Pro 64-bit / 32-bit
- Windows® Internet Explorer® 10.0

**For Windows:**
- Microsoft® Windows® 8.1 Pro 64-bit / 32-bit
- Microsoft® Windows® 8 Pro 64-bit / 32-bit
- Windows® Internet Explorer® 10.0
- Microsoft® Windows® 7 Professional SP1 64-bit / 32-bit
- Windows® Internet Explorer® 11.0 / 10.0 / 9.0 / 8.0

**For Mac:**
- OS X 10.9
- OS X 10.8
- OS X 10.7

**For iPhone, iPad, iPod touch:**
- iOS 7.1

**For Android:**
- Android OS

**CD-ROM drive**
- (for using the Operating Instructions and various software)

**Adobe® Reader®** (for viewing the Operating Instructions on the CD-ROM)

**Power requirements**
- DC 12 V (AC adapter supplied) DC 42 - 57 V (PoE+ power supply)

**Current consumption**
- 1.8 A (AC adapter 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 55 °C (4 °F to 131 °F)

**Dimensions (W x H x D)**
- 180 mm x 230 mm x 234 mm (7-3/32 inches x 9 inches x 9-3/16 inches)

**Mass**
- Approx. 3.1 kg (6.83 lb) (excluding mount bracket)

**Mounting method**
- Stand-alone (Desktop) or suspended (Hanging)

**Ambient operating temperature**
- 0 °C to 40 °C (32 °F to 104 °F)

**Current consumption**
- 1.8 A (AC adapter supplied) 0.6 A (PoE+ power supply)

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- DC 12 V (AC adapter supplied) DC 42 - 57 V (PoE+ power supply)

**Specifications**

As of April, 2018

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- **Memory**
  - For Windows: 1 GB or more
  - For Mac: 2 GB or more

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- Microsoft® Windows®, 8.1 Pro 64-bit / 32-bit
- Windows® Internet Explorer® 10.0

**For Windows:**
- Microsoft® Windows® 8.1 Pro 64-bit / 32-bit
- Microsoft® Windows® 8 Pro 64-bit / 32-bit
- Windows® Internet Explorer® 10.0
- Microsoft® Windows® 7 Professional SP1 64-bit / 32-bit
- Windows® Internet Explorer® 11.0 / 10.0 / 9.0 / 8.0

**For Mac:**
- OS X 10.9
- OS X 10.8
- OS X 10.7

**For iPhone, iPad, iPod touch:**
- iOS 7.1

**For Android:**
- Android OS

**CD-ROM drive**
- (for using the Operating Instructions and various software)

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**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 (blind-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 adapter

**System Camera Options**

**Live Production Center**
AV-HLC100

**Control Assist Camera**
AW-HEA10W

**Control Assist Camera**
AW-HEA10K

**Remote Camera Controller**
AW-RP50

**Remote Camera Controller**
AW-RP120G

(A/C adapter (DC12 V) is required separately.)

**Remote Operation Panel**
AK-HRP200G

(A/C adapter (DC12 V) is required separately.)

**Wireless Remote Control**
AW-RM50G

("AA", "R6" or "LR6" battery x 2 are not included.)

**Direct Ceiling Mount Bracket**
WV-Q105A

For more information, please visit Panasonic web site

https://pro-av.panasonic.net/

*Specifications are subject to change without notice.*

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As of April, 2018

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Czech Republic +420 (0) 903 447 757
Denmark +45 43 20 08 57
Egypt +20 2 23938151
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Germany, Austria, Switzerland +49 (0) 6103 313867
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