





PTZ Camera System Specification Comparison

As of January, 2024 High-end Standard Entry **EU and US** FHD FHD AW-UE50W/K AW-UE20W/K AW-HE20W/K Model AW-UE160W/K AW-UE150W/K AW-HE145W/K AW-UE100W/K AW-UE80W/K **AW-UE4WG/KG** AW-UE40W/K Black (K) Camera Body Color or Pearl White (W) or Pearl White (W) or White (W) or Pearl White (W) or Pearl White (W) or White (W) or White (W) or White (W) or White (W) General 1-type (1")*1 4K MOS 1/2.8-type (1/2.8") MOS 1-type (1") 4K MOS 1-type (1") Full-HD MOS 1/2.5-type (1/2.5") 4K MOS 1/2.5-type (1/2.5") 4K MOS 1/2.5-type (1/2.5") 4K MOS 1/2.8-type (1/2.8") 4K MOS 1/2.5-type (1/2.5") 4K MOS Sensor Approx. 8.49 megapixels **Effective Pixels** Approx. 9.62 megapixels Approx. 20.18 megapixels Approx. 20.18 megapixels Approx. 8.49 megapixels Approx. 8.49 megapixels Approx. 8.46 megapixels Approx. 8.46 megapixels Approx. 8.49 megapixels **Optical Zoom** 20x 20x 24x 24x 24x 12x 12x UHD 24x. FHD 32x UHD 28x. FHD 36x i.Zoom UHD 24x, FHD 32x FHD 32x UHD 28x, FHD 36x UHD 28x, FHD 36x Approx. 16x Approx. 16x **Digital Zoom** 10x 10x 10x 10x 10x 10x 4x 4x 4x Horizontal 75.1° (W) to 4.0° (T) 75.1° (W) to 4.0° (T) 75.1° (W) to 4.0° (T) 74.1° (W) to 3.3° (T) 74.1° (W) to 3.3° (T) 74.1° (W) to 3.3° (T) 71° (W) to 6° (T) 71° (W) to 6° (T) 111° (LDC OFF)*2 FOV Vertical 46.7° (W) to 2.3° (T) 46.7° (W) to 2.3° (T) 46.7° (W) to 2.3° (T) 46.0° (W) to 1.9° (T) 46.0° (W) to 1.9° (T) 46.0° (W) to 1.9° (T) 43° (W) to 3° (T) 43° (W) to 3° (T) 75° (LDC OFF)*2 Diagonal 82.8° (W) to 4.6° (T) 82.8° (W) to 4.6° (T) 82.8° (W) to 4.6° (T) 81.8° (W) to 3.8° (T) 81.8° (W) to 3.8° (T) 81.8° (W) to 3.8° (T) 79° (W) to 7° (T) 79° (W) to 7° (T) 120° (LDC OFF)*2 Auto / Manual Auto / Manual Auto / Manual Focus Auto / Manual Single focus HD: 1,000 TV lines Typ HD: 1,000 TV lines Typ 4K:1,600 TV lines Typ (Center area) 4K:2,000 TV lines Typ (Center area) 4K: 1,500 TV lines Typ (Center area) 4K: 1,500 TV lines Typ (Center area) 4K: 1,500 TV lines Typ (Center area) 4K: 1,400 TV lines Typ (Center area) 4K: 1,400 TV lines Typ (Center area)*3 **Horizontal Resolution** HD: 1,000 TV lines Typ (Center area) | HD: 1,000 TV lines Typ (Center area HD: 1,000 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area) | HD: 1,000 TV lines Typ (Center area) HD: 900 TV lines Typ (Center area)*3 (Center area) HD: 1,000 TV lines Typ (Center area) (Center area) F12 / 2.000 lx (High Sens) F12 / 2,000 lx (High Sens) F14 / 2,000 lx (Low Light) F5.6 / 2,000 lx (High Sens) **Standard Sensitivity** F11 / 2,000 lx (Normal) F9 / 2,000 lx (Normal) F4 / 2,000 lx (Normal) F9 / 2,000 lx (Normal) Auto, 0 dB to 36 dB (1 dB step) Auto, 0 dB to 36 dB (1 dB step) Auto, -3 dB to 36 dB (1 dB step) Auto, -3 dB to 36 dB (1 dB step) Auto, 0 dB to 36 dB (1 dB step) Auto, 0 dB to 42 dB (3 dB step) Gain Auto, -6 dB to 12 dB (1 dB step) Auto, 0 dB to 42 dB (3 dB step) Auto, 0 dB to 42 dB (3 dB step) (Super Gain function equipped: 37 dB to 42 dB) (Super Gain function equipped : 37 dB to 42 dB) (Super Gain function installed: 37 dB to 42 dB) (Super Gain function installed: 37 dB to 42 dB (Super Gain function installed: 37 dB to 42 dB) Serial / IP / IR / USB Serial / IP / IR / USB Serial / IP / IR / USB IP/ IR / USE Control PoE++*4 / XLR Power PoE++*4/XLR PoE++*4 / XLR PoE++*4 / AC PoE++*4 / AC PoE+*4 / AC PoE+*4 / AC PoE+*4/AC PoE*4 / USB 3.0 A (AC) 1.3 A (AC) 1.0 A (USB) 5.0 A(XLR) 4.0 A (XLR) 4.0 A (XLR) 3.0 A (AC) 1.8 A (AC) 1.3 A (AC) **Current Consumption** Weight*5 Approx. 4.6 kg (10.14 lbs) Approx. 4.2 kg (9.24 lbs) Approx. 4.1 kg (9.04 lb) Approx. 2.3 kg (5.06 lb) Approx. 2.0 kg (4.41 lbs) Approx.1.8 kg (3.97 lbs) Approx. 1.9 kg (4.19 lbs) Approx. 1.9 kg (4.19 lbs) Approx. 0.5 kg (1.1 lb) Dimensions (W x H x D) 213 mm x 267 mm x 219 mm 169.2 mm x 204.6 mm x 170.6 mm 160.0 mm x 192.1 mm x 166.0 mm 165.1 mm x 176.2 mm x 176.1 mm 213.0 mm x 277.0 mm x 240.0 mm 213 mm x 267 mm x 219 mm 170.0 mm x 211.0 mm x 171.0 mm 165.1 mm x 176.2 mm x 176.1 mm **Mount Position** Invertible: Ceiling or Desktop*6 Pan Range ±110° (manual) Tilt Range*7 -30° to 210° -30° to 210° -30° to 210° -30° to 210° -30° to 90° -30° to 90° -30° to 90° -30° to 90° ±25° (manual) Maximum speed during manual: 0.08°/s to 180°/s Naximum speed during manual: 0.08°/s to 180°/s Maximum speed during manual: 100°/s Maximum speed during manual: 100°/s Pan / Tilt Speed 3 speed mode installed*8 Maximum speed during preset: 200°/s*5 3 speed mode installed*8 3 speed mode installed*8 Maximum speed during preset: 300°/s Maximum speed during preset: 300°/s Maximum speed during preset: 300°/s | Maximum speed during preset: 200°/s*9 NC35 or less (Nomal use) NC40 or less (60°/s or less) NC40 or less (60°/s or less) **Operation Noise** NC35 or less NC35 or less NC25 or less NC25 or less NC25 or less NC25 or less (P/T standstill) NC55 or less (100°/s or higher) NC55 or less (100°/s or higher) **New Direct Drive System New PTZ Mechanism** (Built-in optical encoder) **Video Output** 12G-SDI ./*10 √*¹⁰ √*10 √*10 √*10 √*10 √*10,11 √*10,11 3G-SDI (AW-UE50W/K HDMI **USB (UVC compatible)** USB2.0 Type-C USB2.0 Type-C USB2.0 Type-C USB2.0 Type-C USB3.0 (5G moblie Router with USB Tethering Support) √*12,13 **SMPTE ST 2110** SRT NDI®*14 (4K) (4K) (FHD) ΙP NDI® | HX*15 (NDI® I HX version 2, FHD) (NDI®|HX version 2, FHD) (NDI® | HX version 2, FHD) (NDI® | HX version 2, 4K) (NDI® | HX version 2, FHD) (NDI* | HX version 2, FHD) nse must be purchased for use A license must be purchased for use license must be purchased for use RTMP/RTMPS RTSP/RTP etc. V*16 **Optical Fiber** J*16 Browser (PC/Mac/Mobile) via IP AW-RP150*17 / AW-RP60*17 AW-RP150 / AW-RP60 Controller / Swhitcher Supported*4 AW-RP150 / AW-RP60*18 AV-UHS500 AV-UHS500 AV-UHS500 AV-UHS500 AV-UHS500 AV-UHS500 IR Remote Control*4 AW-RM50AC AW-RM50AG AW/_RM50AG AW-RM50AG AW-RM50AG AW-RM50AG AW-RM50AG AW-RM50AG AW-RM50AG AK-HRP1010GJ / AK-HRP1015GJ | AK-HRP1010GJ / AK-HRP1015GJ | AK-HRP1010GJ / AK-HRP1015GJ | AK-HRP1010GJ / AK-HRP1015GJ **Remote Operation Panel** AK-HRP1010GJ / AK-HRP1015GJ AK-HRP1010GJ / AK-HRP1015GJ AK-HRP1010GJ / AK-HRP250GJ Software*4 **Basic Functions** Auto Tracking Software Key (Additional Fee) (Additional Fee) (Additional Fee) AW-SF100/AW-SF200 (Additional Fee) (Additional Fee) Media Visual Preset Software Key Suite (Additional Fee) (Additional Fee Video Mixer Software Key (Additional Fee) (Additional Fee) (Additional Fee) AW-SF400G (Additional Fee) (Additional Fee) (Additional Fee) (Additional Fee) (Additional Fee) (Additional Fee SMPTE ST 2110 Activation Software Key AW-SFU60 (Additional Fee) PTZ Virtual USB Driver / **Features** IP Streaming **Image Stabilization** Optical (O.I.S.), Electronic (E.I.S.)*19 Optical (O.I.S.), Electronic (E.I.S.)*19 Optical Optical Optical Optical Night Mode (for IR) Dynamic Range Stretch (DRS) Audio Input / Embedding \checkmark Internal Mic (Audio On/Off: Available Color Temperature Adjustment Up to 100 High Dynamic Range (HDR) (support BT.2020) (support BT.2020) (support BT.2020) V-Log Fanless Design Through, 1/4, 1/16, 1/64 **Built-in ND Filters** Through, 1/4, 1/16, 1/64 Through, 1/4, 1/16, 1/64 Through, 1/4, 1/16, 1/64 Through, 1/4, 1/16, 1/64 **Optical Low-pass Filter** Genlock Digital Noise Reduction (DNR) Equipped with New Image Precessing Engine High-Speed Pan / Tilt Mode*20 **HD Cropping** (Cropping zoom is available.) FreeD*21 FreeD*21 FreeD*21 FreeD*21 AR / VR Systems **Privacy Mode** Tally Lamp ront & Rear Tally / Red, Green, Yell Red, Green Red, Green Red, Green Red, Green Red, Green Red Red USB: Video Conference mode*22 Waveform Display **Horizontal Level Gauge Built-in Auto Tracking**

*NDI® is a new live video production workflow support protocol developed by NewTek, Inc. NDI® is a registered trademark of NewTek, Inc. in the United States and other countries. In this instance, NDI® is used to indicate low latency with high bandwidth NDI®, NDI® | HX.

*1: Effective size. *2: LDC is the abbreviation for Lens Distortion Correction. *3: HDMI output. *4: See the Panasonic website for information on Optional Products / Software (https://pro-av.panasonic.net/en/support/#Compatibility-Chart). *5: Excluding mount bracket. *6: To ensure safety, the unit must be secured using the mount bracket supplied. *7: Depending on the pan or tilt position, the camera may be reflected in the image. *8: Quietness, stationary accuracy, etc., in high-speed mode may vary from normal mode. *9: TILT 140 ° /s. *10: HD output is available from Video Format. *11: Embedded audio is not supported. *12: To use SMPTE ST 2110, need activation by SMPTE ST 2110 Supported Software Key AW-SFU60 (sold separately). *13: 4K compressed output supported vith a firmware update. *14: In this instance, NDI® bandwidth NDI®, NDI® late in this instance, NDI® is used to indicate low latence with high bandwidth NDI®, have a control of the composition in the unit of the composition is output by devices that supported with high bandwidth NDI®, NDI® late in the unit of the composition is output by devices that support with high bandwidth NDI®, NDI® late in the unit of the composition is output by devices that support with nigh sandwidth NDI®, NDI® late in the unit of the number of

MSRP

4K / HD Integrated Camera

High-end



4K PTZ Camera for an era of enhanced creativity and the pursuit of visual expression

- The first PTZ Camera to support the SMPTE ST 2110 standard for video transmission over IP networks*1,2
- Industry's first 5G mobile router (with USB tethering support) support for high-speed, high-capacity video transmission
- New generation engine that maximizes image sensor performance and improves image quality and AF performance
- High sensitivity of F14/2,000 lx, equivalent to a studio camera
- Supports 2x high-speed output
- Supports HDMI, 3G-SDI, and IP output (NDI®*3, NDI®|HX*3, etc.) as well as 12G-SDI output and fiber-optic output

4K Integrated Camera

AW-UE160W/K

High-end

4K 60p/50p*4 output, high-magnification zoom and wide-angle shooting for flexible video production



4K Integrated Camera AW-UE150W/K

HD PTZ Camera that enables high-quality video production even in dark environments



HD Integrated Camera AW-HE145W/K •EU and US only model

4K 60p/50p*4 NDI®*3&SRT supported PTZ Camera with a compact body and a wide range of features



4K Integrated Camera AW-UE100W/K

Standard

Models to respond to a wide range of video production needs, such as recording of reality shows and events



4K

24x

4K Integrated Camera AW-UE80W/K

Standard models suitable for use in online classes and briefing sessions



24x

4K Integrated Camera AW-UE50W/K AW-UE40W/K

For outdoor use

4K/60p compatible, high resolution to prevent missed shots. Outdoor model that can shoot in any external environment



24_x **IP65**

4K Outdoor Integrated Camera **AW-UR100**

Compact 4K entry model suitable for use in meeting rooms and classrooms with limited space

12x

12x



4K Integrated Camera AW-UE20W/K

Compact PTZ Camera suitable for use in meeting rooms and classrooms with limited space



HD Integrated Camera AW-HE20W/K

Compact 4K PTZ Camera equipped with an ultra-wide-angle lens with a 111° field of view and perfect for fixed point shooting



4K Integrated Camera AW-UE4WG/KG

IT/IP Platform

The live video production platform allows flexible system configuration and operation, delivering improved video quality and productivity



KAIROS*5

AT-KC2000S1

AT-KC100

Kairos Core 100



Kairos Control



AT-KC10C1 AT-SFC10



IT/IP Platform KAIROS web site (https://pro-av.panasonic.net/en/products/it ip platform/)

Optional Products / Software

Kairos Core 200 Kairos Core 2000

AT-KC200 AT-KC2000

Remote Camera Controller / Wireless Remote Control

Remote Controller with high operability ensured through touch-panel GUI monitor and a new type of joystick



Remote Camera Controller **AW-RP150**

for clear visibility and a joystick for intuitive control

Equipped with a GUI menu screen

AT-KC10C2



Remote Camera Controller AW-RP60



Infrared Wireless Remote Control AW-RM50AG

Switcher

4K/12G-SDI compatible compact integrated live switcher with high performance and easy operation



Live Switcher AV-UHS500 distribution and webinars



Compact Live Switcher AV-HSW10

Remote Operation Panel (ROP)

These compact operation panels also support PoE* and IP control



*Abbreviation of Power over Ethernet.

Remote Operation Panel (ROP) AK-HRP1010GJ AK-HRP1015GJ*6

Compact operation panel also compatible with Studio Handy Cameras

Broadcast-quality video production with 10bit

processing and easy operation. Active in streaming



Remote Operation Panel (ROP) **AK-HRP250GJ**

- For more information about controllers, please visit here (https://pro-av.panasonic.net/en/products/compatibility_chart/)
- If you need information about Third Party Products, please visit each products' web site (https://pro-av.panasonic.net/en/support/).

Software

NEW Media Production Suite Free Software Platform for Smart Operation and Rich Expression PTZ Control Free **Device View** Free Controls multiple PTZ cameras from PC Manages network settings and firmware updates Auto Tracking Support from 2Q of CY2024 **Visual Preset** Automatically tracks speaker and captures clear images Switches subject of multiple PTZ cameras with a single click Visual Preset Software Key Auto Tracking Software Key (license for one camera) AW-SF300 Plug-ins AW-SF100 Auto Tracking Software Key (license for multiple cameras) Video Mixer Support from 2Q of CY2024 AW-SF200 Diverse video compositions created easily with PC AW-SF202 (2 additional licenses) Video Mixer Software Key AW-SF203 (3 additional licenses) AW-SF400

SMPTE ST 2110 Activation Software Key*7

AW-SFU60

PTZ Virtual USB Driver Free

Converts PTZ camera on your network into Super Web cam

PTZ Camera Systems web site (https://pro-av.panasonic.net/en/products/ptz camera systems.html)



*1: Activation with the separately sold software key AW-SFU60 is required. *2: As of October 2022, according to our research. *3: 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. In this instance, NDI® is used to indicate low latency with high bandwidth NDI*, NDI*|HX is used to indicate high efficiency low bandwidth NDI*|HX. *4: Actual output format is UHD (3840 x 2160) 59.94p/50p. *5: The AW-UE100W/K, AW-UE100W/K, AW-UE50W/K, AW-UE50W/K, AW-UE50W/K, AW-UE40W/K and AW-UR100 are the only PTZ Cameras currently supported, *6: Not available in some areas, *7: AW-UE160W/K only.