





PTZ Camera System Specification Comparison

High-end Standard Entry EU and US FHD FHD AW-UE50W/K AW-UE160W/K AW-UE150W/K AW-HE145W/K AW-UE100W/K AW-UE80W/K AW-UE20W/K AW-HE20W/K AW-UE4WG/KG Model AW-UE40W/K Black (K) Camera Body Color or White (W) or Pearl White (W) or Pearl 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-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 1/2.8-type (1/2.8") 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 12x 12x UHD 28x, FHD 36x UHD 24x, FHD 32x UHD 24x, FHD 32x FHD 32x UHD 28x, FHD 36x UHD 28x, FHD 36x Approx. 16x Approx. 16x i.Zoom **Digital Zoom** 10x 10x 10x 4x 4x 4x 10x 10x 10x 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 Focus Auto / Manual Single focus 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 HD: 1,000 TV lines Typ **Horizontal Resolution** HD: 1,000 TV lines Typ (Center area) | HD: 1,000 TV lines Typ (Center area (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) (Center area) HD: 900 TV lines Typ (Center area)*3 F14 / 2,000 lx (Low Light) F12 / 2,000 lx (High Sens) F5.6 / 2,000 lx (High Sens) **Standard Sensitivity** F9 / 2,000 lx (Normal) F11 / 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, 0 dB to 36 dB (1 dB step) Auto, 0 dB to 36 dB (1 dB step) 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) 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 Control Serial / IP / IR / USB Serial / IP / IR / USB Serial / IP / IR / USB IP/ IR / USB Power PoE++*4,5 / XLR PoE++*4/ XLR PoE++*4/ XLR PoE++*4/ AC PoE+*4/ AC PoE+*4/ AC PoE*4/ USB 4.0 A (XLR) 4.0 A (XLR) 3.0 A (AC) 3.0 A (AC) 1.8 A (AC) 1.3 A (AC) 1.3 A (AC) 1.0 A (USB) 5.0 A(XLR) **Current Consumption** 1.0 A (PoE++) 1.0 A (PoE++) 0.6 A (PoE+) 0.4 A (PoE+) Weight*6 Approx. 2.3 kg (5.06 lb) Approx. 4.6 kg (10.14 lbs) Approx. 4.2 kg (9.24 lbs) Approx. 4.1 kg (9.04 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) 213.0 mm x 277.0 mm x 240.0 mm 213 mm x 267 mm x 219 mm 213 mm x 267 mm x 219 mm 169.2 mm x 204.6 mm x 170.6 mn 170 mm x 211 mm x 171 mm 160 mm x 192.1 mm x 166 mm 165.1 mm x 176.2 mm x 176.1 mm 165.1 mm x 176.2 mm x 176.1 mm **Mount Position** Invertible: Ceiling or Desktop*7 Invertible: Ceiling or Desktop* Pan Range ±110° (manual) Tilt Range*8 -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: 100°/ ximum speed during manual: 0.08°/s to 180°/s Maximum speed during manual: 100°/s Pan / Tilt Speed 3 speed mode installed*9 3 speed mode installed*9 Maximum speed is 180°/s in high-speed mode*9 Maximum speed during preset: 300°/s Maximum speed during preset: 300°/s Maximum speed during preset: 300°/s Maximum speed during preset: 200°/s*10 Maximum speed during preset: 200°/s*10 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** Video Output √*11 √*11 √*11 √*11 *11,12 √*11,12 3G-SDI (AW-UE50W/K) HDMI **USB (UVC compatible)** USB2.0 Type-USB2.0 Type-0 USB2.0 Type-0 USB2.0 Type-C USB3.0 (5G moblie Router with USB Tethering Support √*13,14 SMPTE ST 2110 SRT / NDI**15 (4K) (4K) (FHD) NDI®|HX*16 (NDI®|HX version 2, FHD) (NDI®|HX version 2, FHD) (NDI*|HX version 2, FHD) A license must be purchased for use. (NDI® | HX version 2, 4K) (NDI® | HX version 2, FHD) (NDI® | HX version 2, FHD) license must be purchased for use. (A license must be purchased for use RTMP/RTMPS RTSP/RTP etc. √*17 √*17 **Optical Fiber** Control Browser (PC/Mac/Mobile) via IP AW-RP150 / AW-RP60 Controller / Swhitcher Supported*18 AW-RP150*19 / AW-RP60*19 AW-RP150 / AW-RP60*21 AV-UHS500 / AV-HLC100*20 AV-UHS500 / AV-HLC100*20 AV-UHS500 / AV-HLC100*20 AV-UHS500 AV-UHS500 AV-UHS500 AV-UHS500 **IR Remote Control** AW-RM50G*20 / AW-RM50AG AW-RM50G*²⁰ / AW-RM50AG AW-RM50G*²⁰ / AW-RM50AG AW-RM50G*²⁰ / AW-RM50AG AW-RM50G*20 / AW-RM50AG**Remote Operation Panel** AK-HRP1010GJ / AK-HRP1015GJ AK-HRP1010GJ / AK-HRP1000GJ*20 AK-HRP1010GJ / AK-HRP1000GJ*20 AK-HRP1010GJ / AK-HRP1000GJ*20 AK-HRP1010GJ / AK-HRP1000GJ*20 AK-HRP1010GJ / AK-HRP1000GJ*²⁰ AK-HRP1010 AK-HRP1015GL/AK-HRP1005*20/AK-HRP250G (ROP/RCP)*22 AK-HRP250GJ*23 AK-HRP1015GJ / AK-HRP1005*20 / AK-HRP250GJ | AK-HRP1015GJ / AK-HRP1015GJ / AK-HRP1005*20 / AK-HRP1015GJ / AK-HR SMPTE ST 2110 Activation Software Key AW-SFU60 Auto Tracking Software Key √*25 _*24 _*24 √*²³ AW-SF100/AW-SF200 Visual Preset Software Key AW-SF300 PTZ Control Center PTZ Virtual USB Driver EasyIP Setup Tool Plus **Features IP Streaming Image Stabilization** Optical (O.I.S.), Electronic (E.I.S.)*26 Optical Optical Optical (O.I.S.), Electronic (E.I.S.)*26 Optical Optical Night Mode (for IR) Dynamic Range Stretch (DRS) Audio Input / Embedding \checkmark (XLR x 2) Internal Mic (Audio On/Off: Available) Color Temperature Adjustment Up to 100 Up to 100 Presets Up to 100 High Dynamic Range (HDR) (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) / / uipped with New Image Pr High-Speed Pan / Tilt Mode*27 Video Output 3G SDI OUT 1 3G SDI OUT 3G SDI OUT **HD Cropping** Cropping zoom AR / VR Systems FreeD*28 FreeD*28 FreeD*28 FreeD*28 Privacy Mode Tally Lamp Front & Rear Tally / Red, Green, Yellov Red, Green Red, Green Red, Green Red, Green Red, Green Red Red Red USB: Video Conference mode*29 Waveform Display Horizontal Level Gauge √*23 **Built-in Auto Tracking** √*²³ **MSRP**

As of April, 2023

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 is used to indicate high efficiency low bandwidth NDI*, HE.

*1: Effective size. *2: LDC is the abbreviation for Lens Distortion Correction. *3: HDMI output. *4: See the Panasonic website for information on compatible PoE hubs (https://pro-av.panasonic.net/en/support/#Compatibility-Chart). *5: Limited in function when PoE used. *6: Excluding mount bracket. *7: To ensure safety, the unit must be secured using the mount bracket supplied. *8: Depending on the pan or tilt position, the camera may be reflected in the image. *9: Quietness, stationary accuracy, etc., in high-speed mode may vary from normal mode. *10: TILT 140 ° /s. *11: HD output is available from Video Format. *12: Embedded audio is not supported. *13: To use SMPTE ST 2110 Supported Software Key AW-SFU60 (sold separately). *14: 4K compressed output using JPEG XS will be supported with a firmware update. *15: In this instance, NDI* HX is used to indicate low latency with high bandwidth NDI*. *16: In this instance, NDI* HX is used to indicate high efficiency low bandwidth NDI*, *17: SFP+ module purchased separately. Please reference brochure for recommended models. *18: See individual product pages for information on all supported Remote Operation Panels. *23: Support is planned in future. *22: See individual product pages for information on all supported Remote Operation Panels. *23: Support is planned in future. See the Panasonic website for the latest information (https://pro-av.panasonic.net/en/products/ptz_camera_systems.html). *24: Support is currently under consideration. See the Panasonic website for the latest information required for uses such as AR/VR composition is output by devices that support this protocol. *29: USB:Video Conference mode is a specific mode for using Zoom. Whe

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

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

24x



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 Scheduled for release in the third quarter of CY2023

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

KAIROS*5

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





Kairos Control Kairos Control Kairos Creator AT-KC10C2 AT-KC10C1

AT-SFC10

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

Kairos Core 100

AT-KC100

Optional Products / Software

Kairos Core 200

AT-KC200

Scheduled for release

in June 2023

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**

Kairos Core 2000

AT-KC2000

Scheduled for release in

the third quarter of CY2023

Equipped with a GUI menu screen for clear visibility and a joystick for intuitive control



Remote Camera Controller AW-RP60

distribution and webinars



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



Broadcast-quality video production with 10bit

processing and easy operation. Active in streaming

Scheduled for release in the fourth quarter of CY2023

Remote Operation Panel (ROP)

These compact operation panels also support PoE* and IP control



Remote Operation Panel (ROP) AK-HRP1010GJ

AK-HRP1015GJ*6

*Abbreviation of Power over Ethernet.

Compact operation panel also compatible with Studio Handy Cameras



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



Clear, Sharp Video with Auto Tracking of Speaker Auto Tracking Software Key

AW-SF100 AW-SF200

AW-SF202 2 Additional Licenses

AW-SF203 3 Additional Licenses

Free Software



PTZ Control Center Controls multiple PTZ cameras from PC



PTZ Virtual USB Driver Software that converts PTZ camera on your network into Super Web cam



Visual Preset Software Key AW-SF300

• GUI screen that enables the subject of multiple PTZ

by linking remote cameras and wireless microphones

Cameras to be switched with a single click of an icon

• Automatic switching of camera angles by voice is possible

SMPTE ST 2110 Activation Software Key **AW-SFU60***7

EasyIP Setup Tool Plus Software for camera detection, network settings and firmware update

PTZ Camera Systems web site https://oc.connect.panasonic.com/remote-professional-ptz-camera-systems





*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-UE50W/K and AW-UE40W/K are the only PTZ Cameras currently supported. *6: Not available in some areas *7: AW-LIF160W/K only