

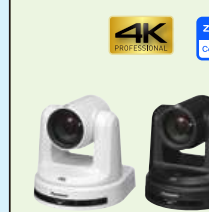
Panasonic

PTZ Camera System Lineup



PTZ Camera System Specification Comparison

As of June, 2024

		High-end				Standard		Entry		
		 *1*2 4K H.265 HDR	 4K H.265 HDR	 EU and US only model FHD	 4K H.265 HDR	 4K H.265 HDR	 4K H.265 HDR Zoom Certified	 4K H.265 HDR Zoom Certified	 FHD Zoom Certified	 4K H.265 HDR Zoom Certified Certified for Microsoft Teams
Model		AW-UE160W/K	AW-UE150W/K	AW-HE145W/K	AW-UE100W/K	AW-UE80W/K	AW-UE50W/K AW-UE40W/K AW-UE30W/K	AW-UE20W/K	AW-HE20W/K	AW-UE4WG/KG
Camera Body Color		Black (K) or Pearl White (W)	Black (K) or Pearl White (W)	Black (K) or Pearl White (W)	Black (K) or Pearl White (W)	Black (K) or White (W)	Black (K) or White (W)	Black (K) or White (W)	Black (K) or White (W)	Black (K) or White (W)
General										
Sensor		1-type (1")*4 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
Effective Pixels		Approx. 9.62 megapixels	Approx. 20.18 megapixels	Approx. 20.18 megapixels	Approx. 8.49 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	20x	24x	24x	24x (AW-UE50, AW-UE40) 20x (AW-UE30)	12x	12x	—
i.Zoom		UHD 24x, FHD 32x	UHD 24x, FHD 32x	FHD 32x	UHD 28x, FHD 36x	UHD 28x, FHD 36x	UHD 28x, FHD 36x	Approx. 16x	Approx. 16x	—
Digital Zoom		10x	10x	10x	10x	10x	10x	4x	4x	4x
FOV	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)*5
	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)*5
	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)*5
Focus		Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Single focus
Horizontal Resolution		4K: 1,600 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	4K: 2,000 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	HD: 1,000 TV lines Typ (Center area)	4K: 1,500 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	4K: 1,500 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	4K: 1,500 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	4K : 1,400 TV lines Typ (Center area) HD: 1,000 TV lines Typ (Center area)	HD: 1,000 TV lines Typ (Center area)	4K : 1,400 TV lines Typ (Center area)*6 HD: 900 TV lines Typ (Center area)*6
Standard Sensitivity		F14 / 2,000 lx (Low Light) F11 / 2,000 lx (Normal)	F12 / 2,000 lx (High Sens) F9 / 2,000 lx (Normal)	F12 / 2,000 lx (High Sens) F9 / 2,000 lx (Normal)	F5.6 / 2,000 lx (High Sens) F4 / 2,000 lx (Normal)	—	—	—	—	—
Gain		Auto, -6 dB to 12 dB (1 dB step)	Auto, -3 dB to 36 dB (1 dB step) (Super Gain function equipped: 37 dB to 42 dB)	Auto, -3 dB to 36 dB (1 dB step) (Super Gain function equipped : 37 dB to 42 dB)	Auto, 0 dB to 36 dB (1 dB step) (Super Gain function installed: 37 dB to 42 dB)	Auto, 0 dB to 36 dB (1 dB step) (Super Gain function installed: 37 dB to 42 dB)	Auto, 0 dB to 36 dB (1 dB step) (Super Gain function installed: 37 dB to 42 dB)	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)
Control		Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR / USB	Serial / IP / IR / USB	Serial / IP / IR / USB	IP/ IR / USB
Power		PoE++*7 / XLR	PoE++*7 / XLR	PoE++*7 / XLR	PoE++*7 / AC	PoE++*7 / AC	PoE++*7 / AC	PoE++*7 / AC	PoE++*7 / AC	PoE*7 / USB
Current Consumption		5.0 A(XLR) 1.5 A(PoE++)	4.0 A (XLR) 1.2 A (PoE++)	4.0 A (XLR) 1.2 A (PoE++)	3.0 A (AC) 1.0 A (PoE++)	3.0 A (AC) 1.0 A (PoE++)	1.8 A (AC) 0.6 A (PoE+)	1.3 A (AC) 0.4 A (PoE+)	1.3 A (AC) 0.4 A (PoE+)	1.0 A (USB) 0.2 A (PoE)
Weight*8		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)		213.0 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 mm	170.0 mm x 211.0 mm x 171.0 mm	160.0 mm x 192.1 mm x 166.0 mm	165.1 mm x 176.2 mm x 176.1 mm	165.1 mm x 176.2 mm x 176.1 mm	123 mm x 131 mm x 139 mm
Mount Position		Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9	Invertible: Ceiling or Desktop*9
PTZ										
Pan Range		± 175°	± 175°	±175°	±175°	±175°	±175°	± 170°	± 170°	±110° (manual)
Tilt Range*10		-30° to 210°	-30° to 210°	-30° to 210°	-30° to 210°	-30° to 210°	-30° to 90°	-30° to 90°	-30° to 90°	±25° (manual)
Pan / Tilt Speed		Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*11	Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*11	Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*11	Maximum speed during manual: 0.08°/s to 180°/s Maximum speed during preset: 300°/s	Maximum speed during manual: 0.08°/s to 180°/s Maximum speed during preset: 300°/s	Maximum speed during manual: 0.08°/s to 180°/s Maximum speed during preset: 300°/s	Maximum speed during manual: 100°/s Maximum speed during preset: 200°/s*12	Maximum speed during manual: 100°/s Maximum speed during preset: 200°/s*12	—
Operation Noise		NC35 or less (Nomal use) NC25 or less (P/T standstill)	NC35 or less	NC35 or less	NC25 or less	NC25 or less	NC25 or less	NC40 or less (60°/s or less) NC55 or less (100°/s or higher)	NC40 or less (60°/s or less) NC55 or less (100°/s or higher)	—
New Direct Drive System		—	—	—	✓	✓	✓	—	—	—
New PTZ Mechanism		✓ (Built-in optical encoder)	—	—	—	—	—	—	—	—
Video Output										
12G-SDI		✓	✓	—	✓	—	—	—	—	—
3G-SDI		✓*13	✓*13	✓*13	✓*13	✓*13	✓*13 (AW-UE50W/K)	✓*13,14	✓*13,14	—
HDMI		✓	✓	✓	✓	✓	✓	✓	✓	✓
USB (UVC compatible)		—	—	—	—	—	✓ USB2.0 Type-C	✓ USB2.0 Type-C	✓ USB2.0 Type-C	✓ USB2.0 Type-C
USB (5G mobile Router with USB Tethering Support)		✓ USB3.0	—	—	—	—	—	—	—	—
IP	SMPTE ST 2110	✓*2	—	—	—	—	—	—	—	—
	SRT	✓	✓	✓	✓	✓	✓	—	—	—
	NDI® High Bandwidth *15	✓ 4K	—	—	✓ (4K)	✓ (FHD)	—	—	—	—
	NDI® HX	✓ NDI® HX, 4K	✓ NDI® HX, FHD A license must be purchased for use.	✓ NDI® HX, FHD A license must be purchased for use.	✓ NDI® HX, FHD	✓ NDI® HX, FHD	✓ NDI® HX, FHD A license must be purchased for use. (AW-UE50W/K, AW-UE40W/K)	—	—	—
	RTMP/RTMPS	✓	✓	✓	✓	✓	✓	✓	✓	✓
RTSP/RTP etc.		✓	✓	✓	✓	✓	✓	✓	✓	✓
Optical Fiber		✓*16	✓*16	—	—	—	—	—	—	—
Control										
Browser (PC/Mac/Mobile) via IP		✓	✓	✓	✓	✓	✓	✓	✓	✓
USB		—	—	—	—	—	—	✓	✓	✓
Controller / Switcher Supported*7		AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500*17	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60 AV-UHS500	AW-RP150 / AW-RP60*18
IR Remote Control*7		AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG
Remote Operation Panel (ROP/RCP)*7 *19		AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ*17	—	—	AK-HRP1010GJ / AK-HRP250GJ
Software*7										
Media Production Suite	Basic Functions	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Auto Tracking Software Key AW-SF100/AW-SF200	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	—	—	—
	Visual Preset Software Key AW-SF300	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)
	Video Mixer Software Key AW-SF400G	✓ (Additional Fee)	✓ (Additional Fee)	✓ (Additional Fee)	✓ (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.)*20	Optical	Optical	Optical (O.I.S.), Electronic (E.I.S.)*20	Optical	Optical	—	—	—
Night Mode (for IR)		✓	✓	✓	✓	✓	—	—	—	—
Dynamic Range Stretch (DRS)		✓	✓	✓	✓	✓	✓	✓	✓	✓
Audio Input / Embedding		✓ (XLR x 2)	✓	✓	✓	✓	✓	✓	✓	—
Internal Mic		—	—	—	—	—	—	—	—	✓ (Audio On/Off: Available)
Color Temperature Adjustment		✓	✓	✓	✓	✓	✓	—	—	—
Presets		Up to 100	Up to 100	Up to 100	Up to 100	Up to 100	Up to 100	Up to 100	Up to 100	Up to 100
High Dynamic Range (HDR)		✓ (support BT.2020)	✓ (support BT.2020)	✓ (support BT.2020)	—	—	—	—	—	—
V-Log		✓	✓	—	—	—	—	—	—	—
Fanless Design		—	—	—	—	—	✓	✓	✓	✓
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	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*21		✓	✓	✓	✓	✓	✓	—	—	—
HD Cropping		✓ (Cropping zoom is available.)	✓	—	✓ (Cropping zoom is available.)	—	—	—	—	—
AR / VR Systems		FreeD*22	FreeD*22	—	FreeD*22	FreeD*22	—	—	—	—
Privacy Mode		✓	—	—	✓	✓	✓	✓	✓	—
Tally Lamp		✓ Front & Rear Tally / Red, Green, Yellow	✓ Red, Green	✓ Red, Green	✓ Red, Green	✓ Red, Green	✓ Red, Green	✓ Red	✓ Red	✓ Red
USB: Video Conference mode*23		—	—	—	—	—	✓	✓	✓	✓
Waveform Display		✓	—	—	—	—	—	—	—	—
Horizontal Level Gauge		✓	—	—	—	—	—	—	—	—
Built-in Auto Tracking		—	—	—	—	✓	✓	—	—	—
MSRP										

1: JPEG logo by Masahito TAKIZAWA is licensed under Creative Commons Attribution-NoDerivs 4.0 International Public License with disclaimer of warranties. The license can be found at <https://jpeg.org/contact.html>. *2: To use SMPTE ST 2110, need activation by SMPTE ST 2110 Supported Software Key AW-SFU60 (sold separately). *3: Microsoft and Microsoft Teams are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. *4: Effective size. *5: LDC is the abbreviation for Lens Distortion Correction. *6: HDMI output. *7: See the Panasonic website for information on Optional Products / Software (<https://pro-av.panasonic.net/en/supported/Compatibility>). *8: Excluding mount bracket. *9: To ensure safety, the unit must be secured using the mount bracket supplied. *10: Depending on the pan or tilt position, the camera may be reflected in the image. *11: Quietness, stationary accuracy, etc., in high-speed mode may vary from normal mode. *12: TILT 140 ° / s. *13: HD output is available from Video Format. *14: Embedded audio is not supported. *15: NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. *16: SFPs: module purchased separately. Please reference brochure for recommended models. *17: AW-EU30W/K: TBD. *18: Unlike when other PTZ Cameras are connected, the display corresponds to the AW-EU4W/KG menu structure. *19: IP only. *20: This EIS works for the roll direction. *21: High-speed mode speeds vary by model. *22: A protocol that outputs camera tracking data for AR/VR systems. Camera pan, tilt, zoom and focus information required for uses such as AR/VR composition is output by devices that support this protocol. *23: USB/Video Conference mode is a specific mode of using Zoom. When using this mode, the EIS work lights blue.

4K / HD Integrated Camera

High-end

Optical Zoom
20x4K
PROFESSIONAL
HDMI

ST 2110

*1*2
JPEG
XS

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*3,4
- Industry's first 5G mobile router (with USB tethering support) support for high-speed, high-capacity video transmission
- 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® High Bandwidth*5, NDI® HX, etc.) as well as 12G-SDI output and fiber-optic output

4K Integrated Camera
AW-UE160W/K

High-end

4K 60p/50p*6 output, high-magnification zoom and wide-angle shooting for flexible video production

Optical Zoom
20x4K
PROFESSIONAL
HDMI4K Integrated Camera
AW-UE150W/K

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

Optical Zoom
20xHD Integrated Camera
AW-HE145W/K
•EU and US only model

4K 60p/50p*6 NDI® High Bandwidth & SRT supported PTZ Camera with a compact body and a wide range of features

Optical Zoom
24x4K
PROFESSIONAL
HDMI4K 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

Optical Zoom
24x4K
PROFESSIONAL
HDMI4K Integrated Camera
AW-UE80W/K

Standard models suitable for use in online classes and briefing sessions

4K
PROFESSIONAL
HDMI4K Integrated Camera
AW-UE50W/K
AW-UE40W/KOptical Zoom
24xzoom
Certified**NEW**
4K Integrated Camera
AW-UE30W/KOptical Zoom
20x

For outdoor use

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

Optical Zoom
24x4K
PROFESSIONAL
HDMI

IP65

4K Outdoor Integrated Camera
AW-UR100

Entry

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

Optical Zoom
12x4K
PROFESSIONAL
HDMIzoom
Certified4K Integrated Camera
AW-UE20W/K

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

Optical Zoom
12xzoom
CertifiedHD 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
PROFESSIONAL
HDMIzoom
Certified4K Integrated Camera
AW-UE4WG/KGCertified for
Microsoft Teams*7

Optional Products / Software

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

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

Remote Camera Controller
AW-RP60Infrared 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 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*8

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

NEW

Media Production Suite **Free**

Software Platform for Smart Operation and Rich Expression

Media Production Suite web site
(<https://pro-av.panasonic.net/en/software/mps/>)Basic
FunctionsDevice View **Free**

Manages network settings and firmware updates

PTZ Control **Free**

Controls multiple PTZ cameras from PC

Plug-ins
(Additional Fee)

Auto Tracking

Automatically tracks speaker and captures clear images

Auto Tracking Software Key (license for one camera)

AW-SF100

Auto Tracking Software Key (license for multiple cameras)

AW-SF200**AW-SF202** (2 additional licenses)**AW-SF203** (3 additional licenses)

Visual Preset

Switches subject of multiple PTZ cameras with a single click
Visual Preset Software Key**AW-SF300**

Video Mixer

Diverse video compositions created easily with PC

Video Mixer Software Key

AW-SF400

SMPTE ST 2110 Activation Software Key*9

AW-SFU60PTZ Virtual USB Driver **Free**Converts PTZ camera on your network into
Super Web camPTZ Camera Systems web site (https://pro-av.panasonic.net/en/products/ptz_camera_systems.html)

IT/IP Platform KAIROS*10

KAIROS
Incredible Productivity

- GPU/CPU-Based Live Video Production Platform with High Scalability
- Flexible I/O Numbers, Video Formats, IP protocols and Basebands
- Freely Expression by Unlimited Number of MEs and Output Aspect Ratio

4K
PROFESSIONAL
HDMI

ST 2110

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

*1: JPEG logo by Masahito TAKIZAWA is licensed under Creative Commons Attribution-NoDerivatives 4.0 International Public License with disclaimer of warranties. The license can be found at <https://jpeg.org/contact.html> *2: To use SMPTE ST 2110, need activation by SMPTE ST 2110 Supported Software Key AW-SFU60 (sold separately). *3: Activation with the separately sold software key AW-SFU60 is required. *4: As of October 2022, according to our research. *5: NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries. *6: Actual output format is UHD (3840 x 2160) 59.94p/50p. *7: Microsoft and Microsoft Teams are trademarks or registered trademarks of Microsoft Corporation in the United States and/or other countries. *8: Not available in some areas. *9: AW-UE160W/K only. *10: The AW-UE160W/K, AW-UE150W/K, AW-UE100W/K, AW-UE80W/K, AW-UE50W/K, AW-UE40W/K and AW-UR100 are the only PTZ Cameras currently supported.