

Panasonic

PTZ Camera System Lineup



PTZ Camera System Specification Comparison

As of July, 2026

		High-end				Standard		Entry		Outdoor
		 AW-UE160W/K	 AW-UE150AW/AK	 AW-HE145W/K Available in limited regions	 AW-UE100W/K	 AW-UE80W/K	 AW-UE50W/K AW-UE40W/K AW-UE30W/K AW-UE50/40 are NDI® certified.	 AW-UE20W/K	 AW-UE5W/K	 AW-UR100
Model		AW-UE160W/K	AW-UE150AW/AK	AW-HE145W/K	AW-UE100W/K	AW-UE80W/K	AW-UE50W/K AW-UE40W/K AW-UE30W/K	AW-UE20W/K	AW-UE5W/K	AW-UR100
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)	Silver
General										
Sensor		1-type (1")*2 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") 4K MOS	1/2.5-type 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. 8.45 megapixels	Approx. 8.29 megapixels
Optical Zoom		20x	20x	20x	24x	24x	24x (AW-UE50, AW-UE40) 20x (AW-UE30)	12x	—	24x
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	—	UHD 28x, FHD 36x
Digital Zoom		10x	10x	10x	10x	10x	10x	4x	5x	10x
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)	121.8° (LDC OFF)*3	74.1° (W) to 3.3° (T)
	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)	87.8° (LDC OFF)*3	46.0° (W) to 1.9° (T)
	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)	129.5° (LDC OFF)*3	81.8° (W) to 3.8° (T)
Focus		Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Auto / Manual	Single focus	Auto / Manual
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)	4K: 1,400 TV lines Typ (Center area)*4 HD: 900 TV lines Typ (Center area)*4	4K: 1,500 TV lines Typ (Center area)
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 36 dB(1 dB step) (Super Gain function equipped: 37 dB to 42 dB)
Control		Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR	Serial / IP / IR / USB	Serial / IP / IR / USB	IP/ IR / USB	Serial / IP / IR
Power*5		PoE++ / XLR	PoE++ / XLR	PoE++ / XLR	PoE++ / AC	PoE++ / AC	PoE+ / AC	PoE+ / AC	PoE / USB	PoE++ / XLR
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+)	3.0 A (USB) 0.3 A (PoE)	3.1 A to 5.5 A (DC) 1.2 A (PoE++)
Weight*6		Approx. 4.6 kg (10.14 lbs)	Approx. 4.3 kg (9.48 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. 0.5 kg (1.1 lb)	Approx. 9.0 kg (19.84 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	123 mm x 131 mm x 139 mm	258.0 mm x 367.0 mm x 392.0 mm
Mount Position		Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7	Invertible: Ceiling or Desktop*7
PTZ										
Pan Range		± 175°	± 175°	±175°	±175°	±175°	±175°	± 170°	±110° (manual)	±175°
Tilt Range*8		-30° to 210°	-30° to 210°	-30° to 210°	-30° to 210°	-30° to 90°	-30° to 90°	-30° to 90°	±25° (manual)	-30° to 210°
Pan / Tilt Speed		Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*9	Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*9	Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*9	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*10	—	Maximum speed during manual: 0.08°/s to 180°/s 3 speed mode installed*9
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)	—	NC45 or less
New Direct Drive System		—	—	—	✓	✓	✓	—	—	—
New PTZ Mechanism		✓ (Built-in optical encoder)	—	—	—	—	—	—	—	—
Video Output										
12G-SDI		✓	✓	—	✓	—	—	—	—	✓
3G-SDI		✓*11	✓*11	✓*11	✓*11	✓*11	✓*11 (AW-UE50W/K)	✓*11,12	—	✓*11
HDMI		✓	✓	✓	✓	✓	✓	✓	✓	—
USB (UVC compatible)		—	—	—	—	—	✓ USB2.0 Type-C	✓ USB2.0 Type-C	✓ USB 5Gbps Type-C	—
USB (5G mobile Router with USB Tethering Support)		✓ USB3.0	—	—	—	—	—	—	—	—
IP	SMPT E ST 2110	✓*13,14	—	—	—	—	—	—	—	—
	SRT	✓	✓	✓	✓	✓	✓	—	—	✓
	NDI®*15	NDI® High Bandwidth NDI® HX2 NDI® Embedded Bridge	NDI® High Bandwidth NDI® HX2 NDI® Embedded Bridge	NDI® HX2	NDI® High Bandwidth NDI® HX2	NDI® High Bandwidth NDI® HX2	NDI® High Bandwidth NDI® HX2 (AW-UE50, AW-UE40)	—	NDI® HX2 NDI® HX3	NDI® High Bandwidth NDI® HX2
	RTMP/RTMPS	✓	✓	✓	✓	✓	✓	✓	✓	✓
	RTSP/RTP etc.	✓	✓	✓	✓	✓	✓	✓	✓	✓
Optical Fiber		✓*16	✓*16	—	—	—	—	—	—	✓*16
Control										
Browser (PC/Mac/Mobile) via IP		✓	✓	✓	✓	✓	✓	✓	✓	✓
USB		—	—	—	—	—	✓	✓	✓	—
Controller Compact Switcher Supported*5		AW-RP200GJ / AW-RP150 AW-RP60 AV-UHS500 / AV-HSW10	AW-RP200GJ / AW-RP150 AW-RP60 AV-UHS500 / AV-HSW10	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10	AW-RP200GJ*17 / AW-RP150*17 AW-RP60*17 AV-UHS500*17 / AV-HSW10*17	AW-RP150 / AW-RP60 AV-UHS500 / AV-HSW10
IR Remote Control*5		AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	AW-RM50AG	—
Remote Operation Panel (ROP)*5,18		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*19	—	—	AK-HRP1010GJ / AK-HRP1015GJ AK-HRP250GJ
Software*5										
Media Production Suite	Basic Functions	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Auto Tracking (Additional Fee)	✓	✓	✓	✓	✓	✓	✓*20	—	✓
	Visual Preset (Additional Fee)	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Video Mixer (Additional Fee)	✓	✓	✓	✓	✓	✓	✓	✓	✓
	Advanced Auto Framing (Additional Fee)	✓	✓	✓	✓	✓	—	—	—	✓
	Image Adjust Pro (Additional Fee)	✓	✓	—	—	—	—	—	—	—
PTZ Virtual USB Driver		✓	—	✓	✓	✓	✓	✓	—	✓
Features										
IP Streaming		✓	✓	✓	✓	✓	✓	✓	✓	✓
Image Stabilization		Optical (O.I.S.), Electronic (E.I.S.)*21	Optical	Optical	Optical (O.I.S.), Electronic (E.I.S.)*21	Optical	Optical	—	—	Optical (O.I.S.), Electronic (E.I.S.)*21, D.I.S.S.
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	—	—	—	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*22		✓	✓	✓	✓	✓	✓	—	—	✓
HD Cropping		✓ (Cropping zoom is available.)	✓ (Cropping zoom is available.)	—	✓ (Cropping zoom is available.)	—	—	—	—	✓
AR / VR Systems		FreeD*23	FreeD*23	—	FreeD*23	FreeD*23	—	—	—	FreeD*23
Privacy Mode		✓	✓	—	✓	✓	✓	✓	—	✓
Tally Lamp		✓ Front & Rear Tally / Red, Green, Yellow	✓ Red, Green, Yellow	✓ Red, Green	✓ Red, Green	✓ Red, Green	✓ Red, Green	✓ Red	✓ Red, Green, Yellow	—
USB: Video Conference mode*24		—	—	—	—	—	✓	✓	✓	—
Waveform Display		✓	—	—	—	—	—	—	—	—
Horizontal Level Gauge		✓	✓	—	—	—	—	—	—	✓
Built-in Auto Tracking		—	✓	—	—	✓	✓	—	—	—
Auto Framing feature*25		✓	—	—	—	—	—	—	—	—
Group Framing feature		—	—	—	—	—	—	—	✓	—

¹ Available on firmware version 1.33 or later, with HDMI output only. ² Effective size. ³ LDC is the abbreviation for Low Latency Correction. ⁴ HDMI output. ⁵ See the Panasonic website for information on Optional Products / Software (https://pro-av.panasonic.net/en/support/Compatibility_Chat). 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 into the image. ⁹ Quiescent, stationary accuracy, etc. ¹⁰ In high-speed mode may vary from nominal. ¹¹ LDC 140°/5°/11°. HD output is available from Video Form. ¹² Embedded audio is not supported. ¹³ To use SMPTE ST 2110, additional setup is needed by the Software Key ASR-SFU60 (sold separately). ¹⁴ Also supports JPEG XS, enabling video transmission in 4K/HDR compressed format. ¹⁵ NDI® is a video connectivity technology and is registered as a trademark by Vizrt NDI AB in the United States and other countries. ¹⁶ SFP: model purchased separately. Please reference brochure for recommended models. ¹⁷ Planned for future support. ¹⁸ IP only. ¹⁹ Only AW-UE50W/K, AW-UE40W/K. ²⁰ The AW-UE20W/K has certain limitations in tracking performance compared to other supported models. We recommend taking advantage of our 90-day free trial to evaluate their performance in your actual operating environment before making a purchase decision. ²¹ This is EIS works for the roll reduction. ²² High-speed mode speeds vary by model. ²³ 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 content output by devices that support this protocol. ²⁴ USB/Video Conference mode is a specific mode for using Zoom. When using this mode, the tally lamp lights blue. ²⁵ May require camera firmware or Media Production Suite update.

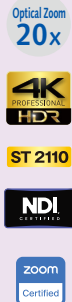
4K / HD Integrated Camera

High-end

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



4K Integrated Camera
AW-UE160W/K



New Standard for Professional Video Expressiveness and Operational Versatility



4K Integrated Camera
AW-UE150AW/AK



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



HD Integrated Camera
AW-HE145W/K
•Available in limited regions



4K 60p/50p*2 NDI® High Bandwidth & 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 Integrated Camera
AW-UE80W/K



Standard models suitable for use in online classes and briefing sessions



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



4K Integrated Camera
AW-UE30W/K



Entry

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



4K Integrated Camera
AW-UE20W/K



Compact 4K PTZ Camera with 121° Ultra-wide-angle Lens and AI-driven Auto Framing



NEW
4K Integrated Camera
AW-UE5W/K



For outdoor use

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



4K Outdoor Integrated Camera
AW-UR100



IT/IP Platform KAIROS*3

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



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

Workflow Tools / Software

Multi Purpose Camera

Box-style 4K camera with high-sensitivity, large-format sensor supporting PTZ common control protocols



4K Multi Purpose Camera
AW-UB50



4K Multi Purpose Camera
AW-UB10

Remote Camera Controller

Next-generation remote camera controller with macro functions for simplified complex operations and dual L/R joysticks for enhanced usability



NEW
Remote Camera Controller
AW-RP200GJ



Remote Camera Controller
AW-RP150



Remote Camera Controller
AW-RP60

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

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

Switcher



Live Switcher
AV-UHS500



Compact Live Switcher
AV-HSW10

Wireless Remote Control



Infrared Wireless Remote Control
AW-RM50AG

Remote Operation Panel (ROP)



Remote Operation Panel (ROP)
AK-HRP1010GJ
AK-HRP1015GJ*4



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

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 Functions	Device Manager 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 / AW-SF203 (2 additional licenses) (3 additional licenses)	Advanced Auto Framing Automatic high-quality, smartly framed video Advanced Auto Framing Software Key • AW-SF501 (perpetual license for one framing camera) • AW-SF503 (perpetual license for three framing cameras) • AW-SF501W (7-day limited license for one framing camera) • AW-SF503W (7-day limited license for three framing cameras) • AW-SF501M (30-day limited license for one framing camera) • AW-SF503M (30-day limited license for three framing cameras) *This product is available in limited regions. Please check with your local sales company for availability.
	Visual Preset Switches subject of multiple PTZ cameras with a single click Visual Preset Software Key AW-SF300	Image Adjust Pro Adjust the image quality of different camera models and multiple units Image Adjust Pro Software Key AW-SF600
	Video Mixer Diverse video compositions created easily with PC Video Mixer Software Key AW-SF400	

PTZ Virtual USB Driver **Free**
Converts PTZ camera on your network into Super Web cam

SMPTE ST 2110 Activation Software Key*5
AW-SFU60

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



*1: Available on firmware version 1.33 or later with HDMI output only. *2: Actual output format is UHD (3840 x 2160) 59.94p/50p. *3: 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. *4: Not available in some areas. *5: AW-UE160W/K only.