



4K PTZ Camera with simultaneous 3G-SDI, HDMI & USB output

AW-UE20

PTZ cameras play an increasingly important role in teleworking such as online meetings and online classes. The AW-UE20 offers high image quality, wide shooting angle and high-magnification zoom to provide more comfortable communication through high-quality video images and stable transmission. The AW-UE20 is compatible with a wide range of systems such as SDI, HDMI, USB and IP, thus allowing flexible camera setup and operation. The AW-UE20 is a high-quality entry model. The compact unit can be installed in a small place without getting in the way.

Key Features

4K PTZ Camera

Simultaneous 3G-SDI, HDMI & USB output

Compact size & wide angle

High-Quality Video Streaming for More Comfortable Online Communication

Excellent system flexibility to achieve smart wiring and smooth operation





AW-UE20

<https://ap.connect.panasonic.com/th/th/aw-ue20>

General -> Power Requirements	12 V DC (10.8 V to 13.2 V) (Supplied AC adapter)
General -> PoE	PoE+
	IEEE802.3at compliant: DC42.5 to 57 V
General -> Current Consumption	1.3 A (Supplied AC adapter), 0.4 A (PoE+ power supply)
General -> Ambient Operating Temperature	0 °C to 40 °C (32°F to 104°F)
General -> Ambient Operating Humidity	20 % to 90 % (no condensation)
General -> Storage Temperature	-20 °C to 50 °C (-4 °F to 122 °F)
General -> Weight	Approx. 1.9 kg (4.19lbs) (excluding ceiling mounting bracket)
General -> Dimensions	W 165.1 mm x H 176.2 mm x D 176.1 mm (6.5 inches x 6.94 inches x 6.93 inches) (Excluding protrusions, cable cover, mounting bracket)
General -> Finish	AW-UE20W: White AW-UE20K: Black
General -> Controller Supported	See the "Compatibility Chart for Operation Devices and Application Software" page
Camera Unit -> Imaging Sensor	1/2.8-type 4K MOS x 1
Camera Unit -> Effective Pixels	Approx. 8,460,000 pixels
Camera Unit -> Zoom	• Optical zoom: 12x • i.Zoom UHD 1.33x, FHD 1.33x • Digital extender zoom: 1.4x, 2x • Max Digital Zoom: 2x, 3x, 4x
Camera Unit -> Lens	Motorized Optical 12x zoom, F1.6 to F2.8 [f=3.9 mm to 46.8 mm; 35 mm equivalent: 26.4 mm to 316.4 mm]
Camera Unit -> Conversion Lens	Not supported
Camera Unit -> Angle of View Range	Horizontal angle of view: 71.0° (wide) to 6.0° (tele) Vertical angle of view: 43.0° (wide) to 3.0° (tele) Diagonal angle of view: 79.0° (wide) to 7.0° (tele)
Camera Unit -> Minimum Illumination	0.4 lx (50IRE, Gain=42dB, Shutter Speed 1/30, IRIS=F1.6)
Camera Unit -> Horizontal Resolution	1,400 Typ (Center area)
> 4K	
Camera Unit -> Horizontal Resolution	1,000 Typ (Center area)
> HD	
Camera Unit -> Gain Selection	Auto, 0dB to 42dB ^{*1}
Camera Unit -> Frame Mix	Auto, 0dB, 6dB, 12dB, 18dB, 24dB
Camera Unit -> Electronic Shutter Speed -> Manual	1/1, 1/2, 1/3, 1/7, 1/15, 1/30, 1/60, 1/120, 1/240, 1/480, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [60Hz/59.94Hz] 1/1, 1/2, 1/3, 1/6, 1/12, 1/25, 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [50Hz]
Camera Unit -> Synchro Scan -> 59.94p/59.94i	60.0Hz to 660.0Hz
Camera Unit -> Synchro Scan -> 50p/50i	50.0Hz to 570.1Hz
Camera Unit -> Synchro Scan -> 29.97p	60.0Hz to 660.0Hz
Camera Unit -> Synchro Scan -> 25p	50.0Hz to 570.1Hz
Camera Unit -> White Balance	ATW, AWB A, AWB B, 3200K, 5600K
Camera Unit -> Chroma Amount Variability	11 steps (0 to 10)
Camera Unit -> Output Format (SDI)	[60Hz]1080/60p, 1080/60i, 1080/30p, 720/60p HD [59.94Hz]1080/59.94p, 1080/59.94i, 1080/29.97p, 720/59.94p [50Hz]1080/50p, 1080/50i, 1080/25p, 720/50p
Camera Unit -> Output Format (HDMI)	[60Hz]2160/30p, 1080/60p, 1080/60i, 1080/30p, 720/60p -> 4K [59.94Hz]2160/29.97p, 1080/59.94p, 1080/59.94i, 1080/29.97p, 720/59.94p [50Hz]2160/25p, 1080/50p, 1080/50i, 1080/25p, 720/50p
Input Connector -> DC IN	DC 12 V IN

Output Connector -> HDMI	HDMI Connector 4:4:4/8 bit • HDCP is not supported. • Viera Link is not supported.
Output Connector -> 3G-SDI OUT	75Ω BNC • Level-A supported *2
Input/Output Connector -> LAN	LAN terminal for IP control (RJ-45) 100BASE-TX/1000BASE-T
Input/Output Connector -> RS-232C	Mini DIN 8-pin (IN)/Mini DIN 8-pin (OUT)
Input/Output Connector -> RS-422	CONTROL IN RS422A (RJ-45)
Input/Output Connector -> USB	Type-C connector
Input/Output Connector -> MIC/LINE Input	MIC/LINE input compatible (SDI/HDMI/IP/USB) AAC compatible (compatible with IP only) ø 3.5 mm stereo mini jack Imbalance • During MIC input Input level: -40 dBV (0 dB=1 V/Pa, 1 kHz) Compatible Plug-in power, Supply voltage: 2.5 V ± 0.5 V • During LINE input Input level: Approx. -10 dBV • Variable input volume range: -36 dB to +12 dB (3 dB step) • Embedded audio output level: -12 dBFS • Sampling frequency: 48 kHz • Number of quantization bits: 16 bits
Pan-tilt Head Unit -> IP connecting cable	• If you have a PoE+ ethernet hub LAN cable *3 (category 5e or above, straight cable) Max 100 m (328 ft) • If you don't have a PoE+ ethernet hub LAN cable *3
Pan-tilt Head Unit -> AW protocol connecting cable	• LAN cable (category 5e or above, straight cable) Max 1000 m (3280 ft)
Pan-tilt Head Unit -> Standard Protocol Connecting Cable	Mini Din 8-pin cable (male)
Pan-tilt Head Unit -> Installation Method	Stand-alone (Desktop) or suspended (Hanging)
Pan-tilt Head Unit -> Pan/tilt Operation Speed	Speed range: Manual: 0.1°/s to 100°/s Preset: 0.1°/s to 200°/s (Tilt: to 140°/s)
Pan-tilt Head Unit -> Panning Range	±170°
Pan-tilt Head Unit -> Tilting range	-30° to 90° *5
Pan-tilt Head Unit -> Quietness	NC40 or less (60 deg/sec or less) NC55 or less (100 eg/sec or less)
Supported Operating Systems and Web Browsers -> Windows<sup>*11</sup>	Windows 10 Windows® Internet Explorer® 11 (32 bit / 64 bit) Microsoft Edge Google Chrome
Supported Operating Systems and Web Browsers -> Mac<sup>*11</sup>	Mac OS v10.15 Mac OS v10.14 Mac OS v10.13 Mac OS v10.12 Safari Google Chrome
IP Streaming -> Image Streaming Mode	MJPEG (HTTP), H.264 (RTSP/RTMP/RTMPS), H.265 (RTSP)
IP Streaming -> Image Resolution	[MJPEG] 1280×720、640×360 [H.264/H.265] 3840×2160、1920×1080、1280×720、640×360
IP Streaming -> Image Transmission Setting (MJPEG) -> Frame Rate<sup>*2</sup>	Max 30fps (25fps)
IP Streaming -> Image Transmission Setting (MJPEG) -> Max Bit Rate<sup>*2</sup>	Unspecified *7
IP Streaming -> Image Transmission Setting (H.264) -> Frame Rate	[60Hz/59.94Hz] 4K: 5fps/15fps/30fps FHD: 5fps/15fps/30fps/60fps [50Hz] 4K: 5fps/10fps/25fps FHD: 5fps/10fps/25fps/50fps

IP Streaming -> Image Transmission Setting (H.264) -> Max Bit Rate	RTSP/RTMP:1024kbps to 32768kbps
IP Streaming -> Image Transmission Setting (H.265) -> Max Bit Rate	RTMPs:1024kbps to 8192kbps
IP Streaming -> Image Transmission Setting (H.265) -> Frame Rate	[60Hz/59.94Hz]
	4K: 5fps/15fps/30fps
	FHD: 5fps/15fps/30fps/60fps
	[50Hz]
	4K: 5fps/10fps/25fps
	FHD: 5fps/10fps/25fps/50fps
IP Streaming -> Image Transmission Setting (H.265) -> Max Bit Rate	1024kbps to 32768kbps
IP Streaming -> Audio Compression Format	AAC-LC, 48kHz/16bit/2ch
IP Streaming -> Supported Protocol -> IPv6	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DNS, ICMPv6, NTP
IP Streaming -> Supported Protocol -> IPv4	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DHCP, DNS, ICMP, ARP, RTMP, RTMPs, NTP
USB web camera -> Image output type	USB Video Class Ver1.1
USB web camera -> Image output type	YUV (Uncompressed), MJPEG, H.264
USB web camera -> Image resolution -> YUV	640x360
USB web camera -> Image resolution -> MJPEG	3840x2160, 1920x1080, 1280x720, 640x360
USB web camera -> Image resolution -> H.264	3840x2160, 1920x1080, 1280x720, 640x360
USB web camera -> Image Transmission Setting (frame rate) -> YUV	[60Hz/59.94Hz]:15fps
	[50Hz]:10fps
USB web camera -> Image Transmission Setting (frame rate) -> MJPEG	[60Hz/59.94Hz]
	4K: 5fps
	FHD: 5fps, 15fps, 30fps
	[50Hz]
	4K: 5fps
	FHD: 5fps 10fps, 25fps
USB web camera -> Image Transmission Setting (frame rate) -> H.264	[60Hz/59.94Hz]
	4K: 5fps, 15fps, 30fps
	FHD: 5fps, 15fps, 30fps, 60fps
	[50Hz]
	4K: 5fps, 10fps, 25fps
	FHD: 5fps, 10fps, 25fps, 50fps
USB web camera -> Audio Output	USB Audio Class Ver1.0
USB web camera -> Audio Compression Format	Linear PCM, 48KHz/16bit/2ch
Footnote Description	<p>Can be set in 3 dB step increments.</p> <p>Embedded audio is not supported.</p> <p>STP (Shielded Twisted Pair) is recommended.</p> <p>To ensure safety, the unit must be secured using the mount bracket supplied.</p> <p>The main unit may appear in the video depending on the pan/tilt position.</p> <p>Supported OS indicated are for browsers current as of September 2021. See Service and Support / PASS" for the latest information on browser support.</p> <p>JPEG and H.264, H.265 simultaneous operation is possible.</p>