



## 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>

<b>General -&gt; Power Requirements</b>	12 V DC (10.8 V to 13.2 V) (Supplied AC adapter)
<b>General -&gt; PoE</b>	PoE+ IEEE802.3at compliant: DC42.5 to 57 V
<b>General -&gt; Current Consumption</b>	1.3 A (Supplied AC adapter), 0.4 A (PoE+ power supply)
<b>General -&gt; Ambient Operating Temperature</b>	0 °C to 40 °C (32°F to 104°F)
<b>General -&gt; Ambient Operating Humidity</b>	20 ◆ to 90 ◆ (no condensation)
<b>General -&gt; Storage Temperature</b>	-20 °C to 50 °C (-4 °F to 122 °F)
<b>General -&gt; Weight</b>	Approx. 1.9 kg (4.19lbs) (excluding ceiling mounting bracket)
<b>General -&gt; Dimensions</b>	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)
<b>General -&gt; Finish</b>	AW-UE20W: White AW-UE20K: Black
<b>General -&gt; Controller Supported</b>	See the "Compatibility Chart for Operation Devices and Application Software" page
<b>Camera Unit -&gt; Imaging Sensor</b>	1/2.8-type 4K MOS x 1
<b>Camera Unit -&gt; Effective Pixels</b>	Approx. 8,460,000 pixels
<b>Camera Unit -&gt; Zoom</b>	<ul style="list-style-type: none"> <li>• Optical zoom: 12x</li> <li>• i.Zoom UHD 1.33x, FHD 1.33x</li> <li>• Digital extender zoom: 1.4x, 2x</li> <li>• Max Digital Zoom: 2x, 3x, 4x</li> </ul>
<b>Camera Unit -&gt; Lens</b>	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]
<b>Camera Unit -&gt; Conversion Lens</b>	Not supported
<b>Camera Unit -&gt; Angle of View Range</b>	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)
<b>Camera Unit -&gt; Minimum Illumination</b>	0.4 lx (50IRE, Gain=42dB, Shutter Speed 1/30, IRIS=F1.6)
<b>Camera Unit -&gt; Horizontal Resolution &gt; 4K</b>	-1,400 Typ (Center area)
<b>Camera Unit -&gt; Horizontal Resolution &gt; HD</b>	-1,000 Typ (Center area)
<b>Camera Unit -&gt; Gain Selection</b>	Auto, 0dB to 42dB *1
<b>Camera Unit -&gt; Frame Mix</b>	Auto, 0dB, 6dB, 12dB, 18dB, 24dB
<b>Camera Unit -&gt; Electronic Shutter Speed -&gt; Manual</b>	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 ]
<b>Camera Unit -&gt; Synchro Scan -&gt; 59.94p/59.94i</b>	60.0Hz to 660.0Hz
<b>Camera Unit -&gt; Synchro Scan -&gt; 50p/50i</b>	50.0Hz to 570.1Hz
<b>Camera Unit -&gt; Synchro Scan -&gt; 29.97p</b>	60.0Hz to 660.0Hz
<b>Camera Unit -&gt; Synchro Scan -&gt; 25p</b>	50.0Hz to 570.1Hz
<b>Camera Unit -&gt; White Balance</b>	ATW, AWB A, AWB B, 3200K, 5600K
<b>Camera Unit -&gt; Chroma Amount Variability</b>	11 steps (0 to 10)
<b>Camera Unit -&gt; Output Format (SDI) -&gt; HD</b>	[60Hz]1080/60p, 1080/60i, 1080/30p, 720/60p [59.94Hz]1080/59.94p, 1080/59.94i, 1080/29.97p, 720/59.94p [50Hz]1080/50p, 1080/50i, 1080/25p, 720/50p
<b>Camera Unit -&gt; Output Format (HDMI) -&gt; 4K</b>	[60Hz]2160/30p, 1080/60p, 1080/60i, 1080/30p, 720/60p [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
<b>Input Connector -&gt; DC IN</b>	DC 12 V IN
<b>Output Connector -&gt; HDMI</b>	HDMI Connector 4:4:4/8 bit <ul style="list-style-type: none"> <li>• HDCP is not supported.</li> <li>• Viera Link is not supported.</li> </ul>
<b>Output Connector -&gt; 3G-SDI OUT</b>	75Ω BNC <ul style="list-style-type: none"> <li>• Level-A supported *2</li> </ul>
<b>Input/Output Connector -&gt; LAN</b>	LAN terminal for IP control (RJ-45) 100BASE-TX/1000BASE-T
<b>Input/Output Connector -&gt; RS-232C</b>	Mini DIN 8-pin (IN)/Mini DIN 8-pin (OUT)
<b>Input/Output Connector -&gt; RS-422</b>	CONTROL IN RS422A (RJ-45)
<b>Input/Output Connector -&gt; USB</b>	Type-C connector

<b>Input/Output Connector -&gt; MIC/LINE Input</b>	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
<b>Pan-tilt Head Unit -&gt; IP connecting cable</b>	• 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
<b>Pan-tilt Head Unit -&gt; AW protocol connecting cable</b>	• LAN cable(category 5e or above, straight cable) Max 1000 m (3280 ft)
<b>Pan-tilt Head Unit -&gt; Standard Protocol Connecting Cable</b>	Mini Din 8-pin cable (male)
<b>Pan-tilt Head Unit -&gt; Installation Method *4</b>	Stand-alone (Desktop) or suspended (Hanging)
<b>Pan-tilt Head Unit -&gt; Pan/tilt Operation Speed</b>	Speed range: Manual: 0.1°/s to 100°/s Preset: 0.1°/s to 200°/s (Tilt: to 140°/s)
<b>Pan-tilt Head Unit -&gt; Panning Range</b>	±170°
<b>Pan-tilt Head Unit -&gt; Tilting range</b>	-30° to 90° *5
<b>Pan-tilt Head Unit -&gt; Quietness</b>	NC40 or less (60 deg/sec or less) NC55 or less (100 eg/sec or less)
<b>Supported Operating Systems and Web Browsers -&gt; Windows *6</b>	Windows 10 Windows® Internet Explorer® 11 (32 bit / 64 bit) Microsoft Edge Google Chrome
<b>Supported Operating Systems and Web Browsers -&gt; Mac *6</b>	Mac OS v10.15 Mac OS v10.14 Mac OS v10.13 Mac OS v10.12 Safari Google Chrome
<b>IP Streaming -&gt; Image Streaming Mode</b>	MJPEG (HTTP), H.264 (RTSP/RTMP/RTMPS), H.265 (RTSP)
<b>IP Streaming -&gt; Image Resolution</b>	[MJPEG] 1280×720、640×360 [H.264/H.265] 3840×2160、1920×1080、1280×720、640×360
<b>IP Streaming -&gt; Image Transmission Setting (MJPEG) -&gt; Frame Rate *7</b>	Max 30fps (25fps)
<b>IP Streaming -&gt; Image Transmission Setting (MJPEG) -&gt; Max Bit Rate *7</b>	Unspecified *7
<b>IP Streaming -&gt; Image Transmission Setting (H.264) -&gt; Frame Rate</b>	[60Hz/59.94Hz] 4K: 5fps/15fps/30fps FHD: 5fps/15fps/30fps/60fps [50Hz] 4K: 5fps/10fps/25fps FHD: 5fps/10fps/25fps/50fps
<b>IP Streaming -&gt; Image Transmission Setting (H.264) -&gt; Max Bit Rate</b>	RTSP/RTMP:1024kbps to 32768kbps RTMPS:1024kbps to 8192kbps
<b>IP Streaming -&gt; Image Transmission Setting (H.265) -&gt; Frame Rate</b>	[60Hz/59.94Hz] 4K: 5fps/15fps/30fps FHD: 5fps/15fps/30fps/60fps [50Hz] 4K: 5fps/10fps/25fps FHD: 5fps/10fps/25fps/50fps
<b>IP Streaming -&gt; Image Transmission Setting (H.265) -&gt; Max Bit Rate</b>	1024kbps to 32768kbps
<b>IP Streaming -&gt; Audio Compression Format</b>	AAC-LC, 48kHz/16bit/2ch
<b>IP Streaming -&gt; Supported Protocol -&gt; IPv6</b>	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DNS, ICMPv6, NTP
<b>IP Streaming -&gt; Supported Protocol -&gt; IPv4</b>	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DHCP, DNS, ICMP, ARP, RTMP, RTMPS, NTP
<b>USB web camera -&gt; Image output type</b>	USB Video Class Ver1.1 YUV (Uncompressed), MJPEG, H.264
<b>USB web camera -&gt; Image resolution -&gt; YUV</b>	640x360
<b>USB web camera -&gt; Image resolution -&gt; MJPEG</b>	3840x2160, 1920x1080, 1280x720, 640x360
<b>USB web camera -&gt; Image resolution -&gt; H.264</b>	3840x2160, 1920x1080, 1280x720, 640x360
<b>USB web camera -&gt; Image Transmission Setting (frame rate) -&gt; YUV</b>	[60Hz/59.94Hz]:15fps [50Hz]:10fps

<b>USB web camera -&gt; Image</b>	[60Hz/59.94Hz]
<b>Transmission Setting (frame rate) -&gt; MJPEG</b>	4K: 5fps FHD: 5fps, 15fps, 30fps [50Hz] 4K: 5fps FHD: 5fps 10fps, 25fps
<b>USB web camera -&gt; Image</b>	[60Hz/59.94Hz]
<b>Transmission Setting (frame rate) -&gt; H.264</b>	4K: 5fps, 15fps, 30fps FHD: 5fps, 15fps, 30fps, 60fps [50Hz] 4K: 5fps, 10fps, 25fps FHD: 5fps, 10fps, 25fps, 50fps
<b>USB web camera -&gt; Audio Output</b>	USB Audio Class Ver1.0
<b>USB web camera -&gt; Audio Compression Format</b>	Linear PCM, 48KHz/16bit/2ch
<b>Footnote Description</b>	<ol style="list-style-type: none"> <li>1. Can be set in 3 dB step increments.</li> <li>2. Embedded audio is not supported.</li> <li>3. STP (Shielded Twisted Pair) is recommended.</li> <li>4. To ensure safety, the unit must be secured using the mount bracket supplied.</li> <li>5. The main unit may appear in the video depending on the pan/tilt position.</li> <li>6. Supported OS indicated are for browsers current as of September 2021. See Service and Support / PASS* for the latest information on browser support.</li> <li>7. JPEG and H.264, H.265 simultaneous operation is possible.</li> </ol>