



## 4K 25/30p PTZ Camera with 24x Optical Zoom and supporting NDI®\*1 HX version 2 and SRT

### AW-UE50

PTZ cameras enhance visual communication in a variety of applications ranging from online classes to online seminars. The AW-UE50/UE40 supports a compact design to blend in with the surroundings and operates very quietly to permit flexible use in any video shooting locations or conditions. The AW-UE50/UE40 offers high security and it is easy to install and operate for capturing stable images, so even people unfamiliar with video shooting or camera operation can utilize it. The excellent flexibility of the product simplifies wiring and operation. Linkage with online conference software or online application is possible, so online video streaming is

#### Key Features

4K 25/30p and 24x Optical Zoom

New Direct Drive System for improved responsiveness and quietness

Supports NDI®\*1 HX version 2 and SRT\*2 protocol

Excellent system flexibility to achieve smart wiring and smooth operation





## AW-UE50

<https://ap.connect.panasonic.com/p/h/en/aw-ue50>

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| <b>General</b>                                  |   |
| <b>Power Requirements</b>                       | 12 V DC (10.8 V to 13.2 V) (Supplied AC adapter)  |
| <b>PoE+</b>                                     | IEEE802.3at compliant : DC42 to 57 V (Camera Input)(Software authentication (LLDP) is supported)  |
| <b>Current Consumption</b>                      | 1.8 A (Supplied AC adaptor), 0.6 A (PoE+ power supply)  |
| <b>Ambient Operating Temperature</b>            | 0 °C to 40 °C (32 °F to 104 °F)   |
| <b>Ambient Operating Humidity</b>               | 20 % to 90 % (no condensation)  |
| <b>Storage Temperature</b>                      | -20 °C to 50 °C (-4 °F to 122 °F)   |
| <b>Mass</b>                                     | Approx. 1.8 kg (3.97 lbs) (excluding ceiling mounting bracket)Approx. 2.05 kg (4.51 lbs) (including ceiling mounting bracket)   |
| <b>Dimensions (W x H x D) (mm)</b>              | 160.0 mm x 192.1 mm x 166.0 mm (Excluding protrusions, cable cover, ceiling mounting bracket)   |
| <b>Dimensions (W x H x D) (inch)</b>            | 6.299 inches x 7.563 inches x 6.535 inches (Excluding protrusions, cable cover, ceiling mounting bracket)   |
| <b>Finish</b>                                   | AW-UE50W: WhiteAW-UE50K: Black  |
| <b>Controller Supported</b>                     | AW-RP150GJ, AW-RP60GJ, AW-RM50AG, AK-HRP1000*2,3, AK-HRP1005*2,3, AK-HRP1015*3, AK-HRP250*3   |
| <b>Camera Unit</b>                              |   |
| <b>Imaging Sensors</b>                          | 1/2.5-type 4K MOS x1  |
| <b>Lens</b>                                     | Motorized Optical 24x zoom, F1.8 to F4.0 [f=4.12 mm (5/32 inches) to 98.9 mm (3-29/32 inches);  |
|   | 35 mm (1-3/8 inches) equivalent: 25.0 mm (31/32 inches) to 600.0 mm (23-5/8 inches)]  |
| <b>Zoom</b>                                     | • Optical zoom: 24x<br><br>• i.Zoom UHD 28x, FHD 36x<br><br>• Digital extender zoom: 1.4 x, 2 x   |
| <b>Conversion Lens</b>                          | Not supported   |
| <b>Angle of View Range</b>                      | Horizontal angle of view: 74.1° (wide) to 3.3° (tele)<br><br>Vertical angle of view: 46.0° (wide) to 1.9° (tele)<br><br>Diagonal angle of view: 81.8° (wide) to 3.8° (tele) |
| <b>Optical Filter</b>                           |   |
| <b>Focus</b>                                    | Switching between auto and manual   |
| <b>Focus Distance</b>                           | Entire zooming range: 1200 mm (3.9 ft)Wide end: 100 mm (0.33 ft)  |
| <b>Color Separation Optical System</b>          | 1MOS  |
| <b>Minimum Illumination</b>                     | 3 lx (F1.8, 59.94p, 50IRE, 42 dB, without accumulation)   |
| <b>S/N</b>                                      |   |
| <b>Horizontal Resolution</b>                    | UHD: 1,500 Typ (Center area)FHD: 1,000 Typ (Center area)  |
| <b>Gain Selection</b>                           | Auto, 0 dB to 36 dB*3 (Super Gain function equipped : 37 dB to 42 dB)   |
| <b>Frame Mix</b>                                | Auto, 0 dB, 6 dB, 12 dB, 18 dB, 24 dB*4   |
| <b>Electronic Shutter Speed</b>                 |   |
| <b>Electronic Shutter Speed   59.94p/59.94i</b> | 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000   |
| <b>Electronic Shutter Speed   29.97p</b>        | 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000   |
| <b>Electronic Shutter Speed   23.98p/24p</b>    | 1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000   |
| <b>Electronic Shutter Speed   50p/50i</b>       | 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000   |
| <b>Electronic Shutter Speed   25p</b>           | 1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000   |
| <b>Syncro Scan</b>                              |   |
| <b>Syncro Scan   59.94p/59.94i</b>              | 60.0 Hz to 7200 Hz  |
| <b>Syncro Scan   29.97p</b>                     | 30.0 Hz to 7200 Hz  |
| <b>Syncro Scan   23.98p/24p</b>                 | 24.0 Hz to 7200 Hz  |
| <b>Syncro Scan   50p/50i</b>                    | 50.0 Hz to 7200 Hz  |
| <b>Syncro Scan   25p</b>                        | 25.0 Hz to 7200 Hz  |
| <b>Gamma</b>                                    | HD / Normal / Cinema1 / Cinema2 / Still Like  |
| <b>White Balance</b>                            | • ATW : 3200 K, 5600 K (ATW Speed 3-stage variables.)• AWB : AWB-A / AWB-B• VAR (selectable between 2000 K and 15000 K by designating a value)                              |
| <b>Chroma Amount Variability</b>                | OFF, -99 % to 99 %  |
| <b>Scene File</b>                               |   |
| <b>Output Format</b>                            |   |
| <b>Synchronization System</b>                   |   |

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| <b>Input</b>  |   |
| <b>Input Connector</b>                              | DC 12 V IN  |
| <b>Output</b>                                       |   |
| <b>Output Format   SDI   HD</b>                     | 1080/59.94p, 50p, 1080/59.94i, 50i, 1080/29.97p (Native), 25p (Native), 23.98p (over59.94i), 1080/29.97psF, 25psF, 23.98psF, 1080/24p (Just), 23.98p (Native), 720/59.94p, 50p  |
| <b>Output Format   HDMI   4K</b>                    | 2160/29.97p (Native), 2160/25p (Native), 2160/24p (Just), 2160/23.98p (Native)  |
| <b>Output Format   HDMI   HD</b>                    | 1080/59.94p, 50p, 1080/59.94i, 50i, 1080/29.97p (Native), 25p (Native), 23.98p (over59.94i), 1080/24p (Just), 23.98p (Native), 720/59.94p, 50p  |
| <b>Video Output</b>                                 |   |
| <b>Video Output   HDMI</b>                          | HDMI 1.4 connector; 4:2:2/10bit<br><ul style="list-style-type: none"> <li>• HDCP is not supported.</li> <li>• Viera Link is not supported.</li> </ul>   |
| <b>Video Output   3G-SDI OUT</b>                    | SMPTE292M, 424M/ 75 Ω (BNCx1)<br><ul style="list-style-type: none"> <li>• Level-A/Level-B supported</li> </ul>  |
| <b>Input/Output</b>                                 |   |
| <b>Input/Output Connector</b>                       |   |
| <b>Input/Output Connector   LAN</b>                 | LAN terminal for IP control (RJ-45)   |
| <b>Input/Output Connector   RS-422</b>              | CONTROL IN RS422A (RJ-45)   |
| <b>MIC/Line Input</b>                               | AAC compatibility (compatible with IP only)<br>Φ3.5 mm stereo mini jack<br><ul style="list-style-type: none"> <li>• During MIC input<br/> Input level: -40 dBV (0 dB=1 V/Pa, 1 kHz)<br/> Supply voltage: 2.5 V±0.5 V (plug-in power compatible)<br/> "* Input impedance: Approx. 2 kΩ (when plug-in power is turned ON)<br/> Approx. 20 kΩ (when plug-in power is turned OFF)"</li> <li>• During LINE input<br/> Input level: -10 dBV<br/> Input impedance: Approx. 3 kΩ<br/> <ul style="list-style-type: none"> <li>• Input volume variable range: -36 dB to 12 dB (3 dB step)</li> <li>• Embedded audio output level: -12 dBFS</li> <li>• Sampling frequency: 48 kHz</li> </ul> </li> </ul> |
| <b>Pan Tilt Head Unit</b>                           |   |
| <b>IP Connecting Cable</b>                          | <ul style="list-style-type: none"> <li>• If you have a PoE+ ethernet hub<br/><br/> LAN cable*6 (category 5e or above, straight cable) Max 100 m (328 ft)</li> <li>• If you don't have a PoE+ ethernet hub<br/><br/> LAN cable*6 (category 5e or above, straight cable) Max 100 m (328 ft)</li> </ul>  |
| <b>AW Protocol Connecting Cable</b>                 | • LAN cable*6 (category 5e or above, straight cable) Max 1000 m (3280 ft)   |
| <b>Camera/Pan-Tilt Head Control</b>                 |   |
| <b>Installation Method</b>                          | Stand-alone (Desktop) or suspended (Hanging)*7  |
| <b>Pan/Tilt Operation Speed</b>                     | Speed range: 0.08°/s to 60°/s (Normal mode)*8<br><br><ul style="list-style-type: none"> <li>• 3 speed modes installed<br/> Normal:60°/s, Fast1:90°/s, Fast2:180°/s</li> </ul>   |
| <b>Panning Range</b>                                | ±175°   |
| <b>Tilting Range</b>                                | -30°to 90°*9  |
| <b>Quietness</b>                                    | NC25 or less  |
| <b>Supported operating systems and web browsers</b> | *10   |
| <b>Windows</b>                                      | Windows 10<br>Windows® Internet Explorer® 11 (32 bit / 64 bit)<br>Microsoft Edge<br>Google Chrome   |
| <b>Mac</b>  | Mac OS v11.0.1 / Safari 14.01<br>Mac OS v11.0.1 / Google Chrome<br>Mac OS v10.15 / Google Chrome<br>Mac OS v10.14 / Google Chrome   |
| <b>iPhone / iPad</b>                                | iOS<br>Safari<br>iPadOS   |
| <b>Android</b>                                      | Android OS<br>Google Chrome   |
| <b>IP Streaming</b>                                 |   |
| <b>Image Streaming Mode</b>                         | JPEG (MJPEG), H.264, H.265, NDI®*1 HX version 2*11,12,13,14 (H.264)   |
| <b>Image Resolution</b>                             | 1920x1080, 1280x720, 640x360, 320x180   |

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| <b>Image Transmission setting (JPEG)</b>  | Frame rate: Maximum 30fps<br>Image quality (Fine / Normal)  |
| <b>Image Transmission Setting (H.264)</b> | Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port<br>Transmission Priority: Constant bit rate, Frame rate, Best effort<br>Frame Rate: [60 Hz] 5fps / 15fps / 30fps / 60fps, [50 Hz] 5fps / 12.5fps / 25fps / 50fps<br>Max Bit Rate: 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps  |
| <b>Image Transmission Setting (H.265)</b> | Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port<br>Transmission Priority: Constant bit rate, Frame rate, Best effort<br>Frame Rate: [60 Hz] 30fps / 60fps, [50 Hz] 25fps / 50fps<br>Max Bit Rate: 512kbps / 768kbps / 1024kbps / 1536kbps / 2048kbps / 3072kbps / 4096kbps / 6144kbps / 8192kbps / 10240kbps / 12288kbps / 14336kbps / 16384kbps / 20480kbps / 24576kbps  |
| <b>Audio Compression Type</b>             | AAC-LC, 48 kHz / 16 bit / 2ch   |
| <b>Supported Protocol</b>                 |   |
| <b>Supported protocol   IPv6</b>          | TCP/IP, UDP/IP, HTTP, HTTPS, DNS, NTP, DHCPv6, RTP, MLD, ICMP, ARP, RTMP, SRT   |
| <b>Supported protocol   IPv4</b>          | TCP/IP, UDP/IP, HTTP, HTTPS, RTSP, RTP, RTP/RTCP, DHCP, DNS, DDNS, NTP, IGMP, ICMP, ARP, RTMP, RTMPS, SRT   |
| <b>New Functions</b>                      |   |
| <b>F-Number Display</b>                   | Displayed on the AW-RP150GJ and AW-RP60GJ sides   |
| <b>Menu Display on IP Video</b>           | Supported*15  |
| <b>Power LED</b>                          | ON/OFF control  |
| <b>Tripod Screw Penetration Measures</b>  | Possible  |
| <b>Pan/Tilt Mechanical Method</b>         | New Direct Drive System   |
| <b>Image Stabilization</b>                | OIS 2-axis<br>MENU switching: Select between Off/O.I.S.   |
| <b>Privacy Mode</b>                       | The lens surface faces backward when standing by (ON/OFF)<br>* Default is OFF   |
| <b>Other Functions</b>                    |   |
| <b>Tally LED display color</b>            | red / green<br>NDI®*1 HX version 2: Upgradable<br>1920x1080, 1280x720<br>Transmission Type: Streaming method: TCP/UDP, Unicast/Multicast<br>AAC-LC, 48 kHz, 16 bit, 2 ch  |
| <b>Note</b>                               | *1: NDI® is a registered trademark of Vizrt NDI AB in the United States and other countries.<br>*2: Discontinued Model<br>*3: Will be supported in the future<br>*4: Can be set in 1 dB step increments.<br>*5: Cannot be set when the format is 2160/29.97p, 2160/23.98p, 2160/24p, 2160/25p, 1080/29.97p, 1080/23.98p (59.94i), 1080/29.97PsF, 1080/23.98PsF, 1080/25p, 1080/25PsF.<br>*6: STP (Shielded Twisted Pair) is recommended.<br>*7: To ensure safety, the unit must be secured using the mount bracket supplied.<br>*8: Note that the operating noise may be loud in high speed. If the operating noise is disturbing, use the Normal mode.<br>*9: The main unit may appear in the video depending on the pan/tilt position.<br>*10: Supported OS indicated are for browsers current as of September 2021. See "Service and Support / PASS" for the latest information on browser support.<br>*11: NDI® is a new protocol developed by NewTek, Inc. that supports IP video production workflow.<br>*12: NDI® is a registered trademark of NewTek, Inc. in the United States.<br>*13: 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. In the NDI® HX mode, 4K video signals cannot be output. AW-UE50/AW-UE40 supports NDI® HX version 2 and Full HD output.<br>*14: For details, please contact a sales representative of Panasonic. To use NDI® HX, the driver must be installed and activated.<br>*15: Non-synchronous with SDI-OUT |