



## Full HD Rugged Outdoor PTZ Camera

### AW-HR140

The AW-HR140 is an integrated remote camera system that incorporates an outdoor housing, camera, lens and pan-tilt head and maintains stable shooting performance in the toughest of environments. It is equipped with the same DSP and full HD 3MOS sensors as the AW-HE130 which results in high sensitivity, high S/N ratio, and high resolution due to its advanced video processing.

#### Key Features

1/2.86 type full HD 3MOS sensors and Digital Signal Processor (DSP)

20x Optical Zoom (plus 1.4x Digital Extender)

Hybrid Image Stabilizer (mechanical and optical, named DISS) for stable shooting performance

Protection IP65, salt-resistant paint & includes wipers, heater and defroster (washer optional)

Full HD Rugged Outdoor PTZ Camera with special functions: Intelligent, Haze Reduction & Night Mode



## AW-HR140

<https://eu.connect.panasonic.com/en/products/broadcast-proav/aw-hr140>

<b>General</b>	
<b>Power Requirements</b>	DC 12 V to 21.8 V (DC IN connector) DC 42 V to 57 V (PoE++ power supply)
<b>Current Consumption</b>	3.1 A to 5.5 A (DC IN connector) 1.2 A (PoE++ power supply)
<b>Ambient Operating Temperature</b>	-15 °C to 45 °C (5 °F to 113 °F) (preheating is required when -5 °C (23 °F) or less)
<b>Ambient Operating Humidity</b>	10% to 100% (no condensation)
<b>Storage Temperature</b>	-20 °C to 55 °C (-4 °F to 131 °F)
<b>Storage Humidity</b>	10% to 95% (no condensation)
<b>Mass</b>	Approx. 9.0 kg (19.84 lb)
<b>Dimensions (W x H x D)</b>	258 mm x 357 mm x 397 mm (10-5/32 inches x 14-1/16 inches x 15-5/8 inches) (including protrusions and cable cover)
<b>Finish</b>	Silver, salt resistant coating
<b>Waterproof and Dust Proof</b>	IP65 compliant
<b>Maximum Permissible Wind Speed</b>	15 m/sec: Operates normally 50 m/sec: Operation possible 60 m/sec: No damage
<b>Wiper</b>	Installed as standard
<b>Heater</b>	Installed as standard
<b>Defroster</b>	Installed as standard
<b>Controller Supported</b>	AW-RP120G, AW-RP50, AK-HRP200G <ul style="list-style-type: none"> <li>It may be necessary to upgrade the version of the controller in order to support the unit. For details on upgrading, visit the support page on the following website.</li> </ul>
<b>Camera Unit</b>	
<b>Imaging Sensors</b>	1/2.86-type Full-HD 3MOS
<b>Lens</b>	Optical 20x zoom/10x digital zoom, F1.6 to F3.4 (f=4.5 mm to 90 mm; 35 mm equivalent: 32.13 mm to 642.5 mm)
<b>Focus</b>	Switching between auto and manual
<b>Focus Distance</b>	Entire zooming range: 800 mm (2.62 ft) Wide end: 400 mm (1.31 ft)
<b>Color Separation Optical System</b>	3MOS
<b>Minimum Illumination</b>	2 lx (50 IRE, F1.6, 36 dB, without accumulation)
<b>Horizontal Resolution</b>	1000 TV lines Typ (Center area)
<b>Gain Selection</b>	Auto, 0 dB to 42 dB (1 dB steps) 37 dB to 42 dB is Super Gain Mode
<b>Frame Mix</b>	0 dB, 6 dB, 12 dB, 18 dB, 24 dB <ul style="list-style-type: none"> <li>This cannot be configured when the format is 1080/29.97p, 1080/23.98p, 1080/29.97PsF, 1080/23.98PsF, 1080/25p, or 1080/25PsF.</li> <li>When [Iris Mode] or [Focus Mode] is set to [Auto], this cannot be set to 18 dB or 24 dB.</li> </ul>
<b>Electronic Shutter Speed   59.94p/59.94i</b>	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
<b>Electronic Shutter Speed   29.97p</b>	1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
<b>Electronic Shutter Speed   23.98p</b>	1/24, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
<b>Electronic Shutter Speed   50p/50i</b>	1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
<b>Electronic Shutter Speed   25p</b>	1/25, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
<b>Synchro Scan   59.94Hz</b>	60.15 Hz to 642.21 Hz (255 steps)
<b>Synchro Scan   50Hz</b>	50.15 Hz to 535.71 Hz (255 steps)
<b>Gamma</b>	HD, FILMLIKE1, FILMLIKE2, FILMLIKE3 0.30 to 0.75 (Manual setting)
<b>White Balance</b>	AWB A, AWB B, ATW, 3200K, 5600K, VAR (2000K to 15000K)
<b>Chroma Amount Variability</b>	OFF, -99% to 40%
<b>Scene File</b>	Scene1, Scene2, Scene3, Scene4
<b>Intelligent Functions</b>	Auto function for each of accumulation, gain, iris, electronic shutter, ND, and ATW
<b>Output Format</b>	1080/59.94p, 1080/29.97p*1, 1080/23.98p*2, 1080/59.94i, 1080/29.97PsF*3, 1080/23.98PsF*3, 720/59.94p, 1080/50p, 1080/25p*1, 1080/50i, 1080/25PsF*3, 720/50p
<b>Synchronization System</b>	Internal/External synchronization (BBS/Tri-level sync)
<b>Line Input Audio In 1/2   Input Impedance</b>	High impedance

<b>Line Input Audio In 1/2   Input</b>	2 channels, XLR balanced input <ul style="list-style-type: none"> <li>Input signal level: +4 dBu/0 dBu/-20 dBu (selectable in menu)</li> <li>Volume variable range: -40 dB to +12 dB</li> </ul> (can be changed in 1 dB steps in the menu)
<b>Line Input Audio In 1/2   Output</b>	<ul style="list-style-type: none"> <li>4 channels, superimposed over SDI output</li> <li>Embedded audio output level: <p>FS-12 dB: -12 dBFS, FS-18 dB: -18 dBFS, FS-20 dB: -20 dBFS</p> (selectable in menu)</li> <li>Sampling frequency: 48 kHz (synchronized to video)</li> <li>Quantization bit rate: 24-bit (LPCM)</li> <li>Audio compression format (IP): G.726, AAC-LC (High quality)</li> </ul>
<b>Input</b>	
<b>Input Connector   12V In</b>	XLR connector
<b>Input Connector   G/L In</b>	BNC connector <ul style="list-style-type: none"> <li>BBS (Black Burst Sync), tri-level sync supported</li> <li>Locking to a subcarrier is not possible with BBS.</li> </ul>
<b>Input Connector   Audio Input</b>	mini XLR connector (line input) <p>#1: INPUT1 Common, #2: INPUT1 HOT, #3: INPUT1 COLD, #4: INPUT2 Common, #5: INPUT2 HOT, #6: INPUT2 COLD</p>
<b>Output</b>	
<b>Video Output   HD-SDI Out</b>	SMPTE424/SMPTE292 standards <p>75 Ω (BNC x 2)</p> <ul style="list-style-type: none"> <li>OSD output is possible from the SDI OUT 1/PM connector but not from the SDI OUT 2 connector.</li> </ul>
<b>Input/Output</b>	
<b>Input/Output Connector   LAN</b>	LAN connector for IP control/video output/audio output/PoE++ power supply <p>PoE++ (IEEE802.3bt Draft ver.2.0 standard)</p>
<b>Input/Output Connector   RS-422</b>	CONTROL IN RS-422A
<b>Input/Output Connector   EXT</b>	#1: DC GND, #2: HOT, #3: COLD, #4: 12V-OUT
<b>Pan-Tilt Head Unit</b>	
<b>Installation Method</b>	Stand-alone (Desktop) or suspended (Hanging) <ul style="list-style-type: none"> <li>To ensure safety, the unit must be secured using the mount bracket supplied.</li> </ul>
<b>Camera/Pan-Tilt Head Control   IP Connecting Cable</b>	<ul style="list-style-type: none"> <li>When connecting through a PoE++ hub: <p>LAN cable*4 (category 5e or above, straight cable), max. 100 m (328 ft)</p> </li> <li>When a PoE++ hub is not used: <p>LAN cable*4 (category 5 or above, straight cable) max. 100 m (328 ft)</p> </li> </ul>
<b>Camera/Pan-Tilt Head Control   AW Series Connecting Cable/Standard Protocol Connecting Cable</b>	LAN cable*4 (category 5 or above, straight cable), max. 1000 m (3280 ft)
<b>Pan/Tilt Operation Speed</b>	Maximum speed 60°/s or higher
<b>Panning Range</b>	±175° <ul style="list-style-type: none"> <li>For suspended installations, the positions of the pins that determine the movement range must be changed.</li> </ul>
<b>Tilting Range</b>	-30° to 210° <ul style="list-style-type: none"> <li>Depending on the pan or tilt position, the camera may be reflected in the image.</li> <li>For suspended installations, the positions of the pins that determine the movement range must be changed.</li> </ul>
<b>Quietness</b>	60°/s (NC45 or less)
<b>Vibration Correction</b>	D.I.S.S. (Dynamic Image Stabilizing System)
<b>Accessories</b>	Hexagonal bolt M8 × 30 mm: 4 M8 washer : 4 Spring washer: 4 Cable cover : 1 Washer nozzle mount bracket: 1 Drop-prevention wire : 1 Drop-prevention wire mounting screw (with hexagonal socket, for unit) M4 × 10 mm : 1
<b>Note</b>	*1: Native output *2: Over 59.94i output *3: For 1080/25PsF, 50i may be displayed on the monitor screen. Furthermore, for 1080/23.98PsF and 29.97PsF, 59.94i may be displayed on the monitor screen. *4 Use of an STP (shielded twisted pair) cable is recommended. <ul style="list-style-type: none"> <li>When connecting directly to a controller without an Ethernet hub, use a cross cable.</li> </ul>