



Outdoor Integrated Pan-Tilt Full HD Remote Camera with High Sensitivity and High S/N ratio

The camera component features 1/2.86-type full HD 3MOS sensors and a DSP (Digital Signal Processor). High sensitivity, with high S/N ratio and high resolution are achieved with sophisticated image processing. In addition, water and dust-resistant (IP65) case with salt-damage resistance and a wiper as the standard feature, the camera can be installed outdoors without a housing. Even with the vibrations that occur in nature or other installation environments, clear images are captured with the vibration compensation provided by the newly developed Dynamic Image Stabilizing System (D.I.S.S.). Using an IP connection, up to 100 cameras can be controlled by the AW-RP120G/RP50 remote camera controller via a hub (switching hub). One camera can also be operated by up to five of the remote camera controllers via IP connection. This outdoor SDI-output remote camera can be easily used not only as an information capturing camera, but also for various applications, such as video capture in stadiums or high-image-quality monitoring in airports.

Haze Reduction Function

For installations in places where haze tends to occur, this function creates clearer images shot by the camera. Three settings can be selected for the compensation level.



*Images are simulated.

Supported Formats

1080/59.94p 1080/50p 1080/59.94i 1080/50i 1080/29.97p^{*1} 1080/25p^{*1} 1080/23.98p^{*2} 1080/29.97PsF^{*3} 1080/25PsF^{*3} 1080/23.98PsF^{*3} 720/59.94p 720/50p

*1: Native output *2: Over 59.94i *3: 50i may be displayed on the screen when 1080/25PsF is selected. Similarly, 59.94i may be displayed on the screen for 1080/23.98PsF and 1080/29.97PsF.

Full-HD Outdoor Integrated Camera AW-HR140

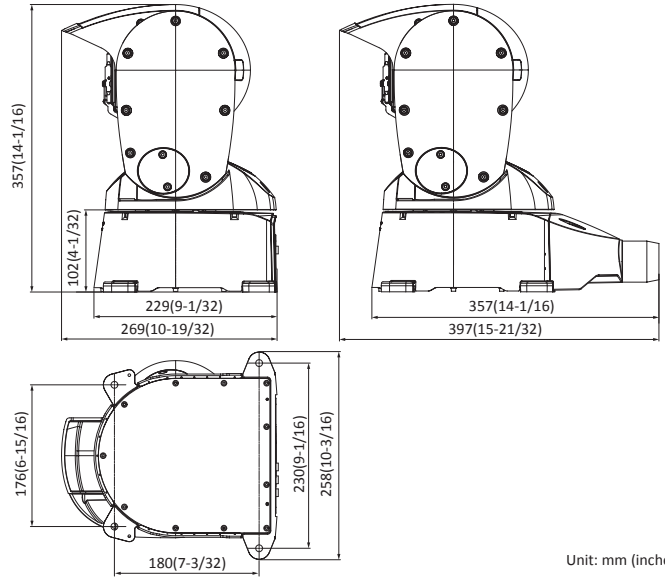
Specifications

Power Supply	DC 12 V to 24 V
Power Consumption	5.5 A to 3.1 A (DC IN)
DC Outlet	DC 6 W(12 V/0.5 A)
Ambient Operating Temperature	-15 °C to 45 °C (5 °F to 113 °F) (Preheating is required at a temperature of -5 °C or below.)
Allowable Humidity Range	10% to 100%
Weight	Approx. 9.0 kg (19.8 lb) (including mount bracket)
Dimensions (W x H x D)	258 mm x 357 mm x 397 mm (10-3/16 inches x 14-1/16 inches x 15-21/32 inches) (including protrusions and mount bracket)
Finish	Silver, Anti-salt air corrosion protection
Water and Dust Resistance	IP65 (JIS C0920)
Maximum Allowable Wind Speed	15 m/s: normal operation, 50 m/s: operable, 60 m/s: non-destructive
Wiper	Equipped
Heater	Equipped
Defroster	Equipped
Controller Supported*1	AW-RP50, AW-RP120G, AK-HRP200G
Image Sensors	1/2.86-type MOS x 3 (Full HD)
Lens	Motorized 20x zoom, i.Zoom 10x, F1.6 to F3.4 [f=4.5 mm (3/16 inches) to 90 mm (3-9/16 inches)], 35 mm (1-3/8 inches) equivalent: 32.1 mm (1-9/32 inches) to 642.5 mm (25-5/16 inches)
Focus	Switching between auto and manual
Focus Distance	Entire zooming range: 800 mm (31-1/2 inches) Wide end: 400 mm (15-3/4 inches)
Color Separation Optical System	3MOS
Minimum Illumination	2 lx (50 IRE, F1.6, +36dB, no frame accumulation)
Horizontal Resolution	HD: 1000 TV lines Typ (center area)
Gain	Auto, 0 dB to 42 dB (1 dB Step), 37 dB to 42 dB (Super Gain Mode)
Frame Mix	0 dB, 6 dB, 12 dB, 18 dB, 24 dB
Electronic	59.94p / 59.94i
Shutter	1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Speed	29.97p
Speed	1/30, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Speed	1/24, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Speed	1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Speed	1/25, 1/60, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000
Synchro Scan	60 Hz: 60.15 Hz to 642.21 Hz (255 steps) 50 Hz: 50.15 Hz to 535.71 Hz (255 steps)
Gamma	HD, FILMLIKE1, FILMLIKE2, FILMLIKE3 0.30 to 0.75 (Manual Setting)
White Balance	AWB A, AWB B, ATW, 3200 K, 5600 K, VAR (2000 K to 15000 K)
Chroma Amount Variability	OFF, -99% to 40%
Scene File	Scene1, Scene2, Scene3, Scene4
Intelligent Functions	Accumulation, Gain, IRIS, Electronic shutter, ND, ATW (Auto functions)
Synchronization System	Internal/External synchronization (BBS/Tri-level sync)
DC IN	XLR x 1
G/L IN	BNC x 1
AUDIO IN	MiniXLR (Line Input) (AG6FCCH) (#1: Lch Common, #2: Lch HOT, #3: Lch COLD, #4: Rch Common, #5: Rch HOT, #6: Rch COLD)
Input	Input Impedance: High impedance 2 ch, XLR input (balanced) Input Signal Level: 4 dBu/0 dBu/-20 dBu (Selectable in MENU) Input Dynamic Range: -40 dB to 12 dB (1 dB step: selectable in MENU) S/N: 60 dB or more (Design assurance) Distortion Factor: 1% or less (Design assurance)
Line Input (AUDIO IN)	Frequency Characteristic: 20 to 20 kHz (3 dB lower) (Design assurance) 4 ch superimposing SDI Output Embedded Audio Output Level: Output FS-12 dB: -12 dBFS, FS-18 dB: -18 dBFS, FS-20 dB: -20 dBFS (Selectable in MENU) Sampling Frequency: 48 kHz (Synchronizing with video) Quantization Bit Rate: 24 bit (LPCM)
HD-SDI OUT	BNC x 2 SMPTE424/SMPTE292 standards 75 Ω * Only SDI 1 menu displayable
LAN	IP control, Video/Audio output
RS-422	CONTROL IN RS-422A (RJ-45)
EXT	#1: DC GND, #2: HOT, #3: COLD, #4: 12 V-OUT
Washer control DC outlet	Supports Mikami Washer Unit (HR10A-7R-4SC(73)) #1: DC-OUT_GND, #2: Washer_HOT, #3: Washer_COLD, #4: DC-OUT_+12V
Installation Method	Stand-alone (Desktop) or suspended (Hanging) *To ensure safety, the unit must be secured using the mount bracket supplied.
Pan/Tilt Operation Speed	Maximum speed: 60 °/s or more
Panning Range	±175 °
Tilting Range	-30 ° to 210 °

Quietness	60 °/s: NC45 or less
Image Stabilization	D.I.S.S. (Dynamic Image Stabilizing System)
Video Compression Format	JPEG (Motion JPEG), H.264
Resolution	1920 x 1080 (2M/4M/24M), 1280 x 720, 640 x 360, 320 x 180, 160 x 90
Image quality:	3 levels
Distribution methods:	Unicast, Multicast
Distribution modes:	- Constant bit rate, Best-effort delivery, Advanced variable bit rate: 64 kbps, 128 kbps, 256 kbps, 384 kbps, 512 kbps, 768 kbps, 1024 kbps, 1536 kbps, 2048 kbps, 3072 kbps, 4096 kbps, 6144 kbps, 8192 kbps, 10240 kbps, 12288 kbps, 14336 kbps, 16384 kbps, 20480 kbps, 24576 kbps - Frame rate (60 Hz): 1 fps, 2 fps, 3 fps, 5 fps, 6 fps, 10 fps, 15 fps, 30 fps, 60 fps Streaming mode: 4 types of streaming settings are separately available.
Video Transmission	Audio Compression Format AAC: 48 kHz, G726 (ADPCM)

*1: Firmware upgrade is required to support the unit. For details on the firmware updates, please refer to support pages on the Panasonic website.
*Specifications are subject to change without notice.

Dimensions



Unit: mm (inches)

System Camera Options

As of March, 2017

 Remote Camera Controller AW-RP50	 Remote Camera Controller AW-RP120G (AC adaptor (DC12 V) is required separately.)	 Remote Operation Panel AK-HRP200G (AC adaptor (DC12 V) is required separately.)
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Factories of AVC Networks Company have received ISO14001:2004-the Environment Management System certification. (Except for 3rd party's peripherals.)