Panasonic CONNECT



HD remote camera that enables high-quality video production even in dark environments.

AW-HE145

The HD integrated camera AW-HE145 realizes high sensitivity of F9/2000lx with the mounted 1.0-type MOS sensor, and can shoot beautifully at stage events or church services with low light. The operation mechanism is the same design as the high-end model, so the operating performance of the pan/tilt and zoom is smooth and accurate, allowing you to shoot without stress. Furthermore, it is equipped with an optical 20x zoom and horizontal 75.1° wide-angle lens to realize flexible video production.

Key Features

- High sensitivity achieved with the 1-type large-sized sensor
- Optical 20x zoom/horizontal 75.1° wide-angle shooting
- Pan/tilt performance that achieves smooth and accurate operation
- Enables high-quality video production even in dark environments
- SRT support for stable video transmission

SRT SECURE RELIABLE TRANSPORT

Panasonic CONNECT






AW-HE145

https://eu.connect.panasonic.com/gb/en/products/broadcast-proav/aw-he145

General	
Power Requirements	12 V DC (10.8 V to 13.2 V), DC 42 V to 57 V (Camera Input, PoE++ power supply)
Current Consumption	4.0 A (XLR IN connector), 1.2 A (PoE++ power supply)
Ambient Operating Temperature	0 °C to 40 °C (32 °F to 104 °F)
Ambient Operating Humidity	20 % to 90 % (no condensation)
Storage Temperature	–20 °C to 50 °C (–4 °F to 122 °F)
Mass	Approx. 4.1 kg (9.04 lb) (excluding mount bracket)
Dimensions (W x H x D)	213 mm x 267 mm x 219 mm (8-3/8 inches x 10-1/2 inches x 8-5/8 inches) (excluding protrusions, direct ceiling mount bracket)
Finish	AW-HE145W: Pearl white AW-HE145K: Metallic Black
Controller Supported	AW-RP150, AW-RP60, AK-HRP1000GJ, AK-HRP1015GJ, AK-HRP250GJ*1
Camera Unit	
Imaging Sensors	1-type Full-HD MOSx1
Lens	Motorized Optical 20x zoom, F2.8 to F4.5 [f=8.8 mm (11/32 inches) to 176.0 mm (6-15/16 inches); 35 mm (1-3/8 inches) equivalent: 24.5 mm (31/32 inches) to 490.0 mm (19-9/32 inches)]
Zoom	• Optical zoom: 20x • i.Zoom: FHD 32x • Digital zoom: 10x
Conversion Lens	Not supported
Angle of View Range	Horizontal angle of view: 75.1° (wide) to 4.0° (tele) Vertical angle of view: 46.7° (wide) to 2.3° (tele) Diagonal angle of view: 82.8° (wide) to 4.6° (tele)
Optical Filter	Through, 1/4, 1/16, 1/64, IR through (IR through is used as “Night mode”)
Focus	Switching between auto and manual
Focus Distance	Entire zooming range: 1000 mm (3.3 ft) Wide end: 100 mm (0.33 ft)
Color Separation Optical System	1MOS
Standard Sensitivity	F9, 2000 lx (When normal mode is selected)
Minimum Illumination	2 lx (F2.8, 59.94p, 50IRE, 42 dB, without accumulation)
Horizontal Resolution	1000 TV lines Typ (Center area)
Gain Selection	Auto, 0 dB to 36 dB*2 Super Gain function equipped : +37 dB to 42 dB
Frame Mix*3	0 dB, 6 dB, 12 dB, 18 dB, 24 dB
Electronic Shutter Speed	59.94p/59.94i: 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 29.97p: 1/30, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 23.98p/24p: 1/24, 1/48, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 50p/50i: 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000 25p: 1/25, 1/50, 1/60, 1/100, 1/120, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/10000
Synchro Scan	59.94p/59.94i: 60.00 Hz to 7200 Hz 29.97p: 30.00 Hz to 7200 Hz 23.98p/24p: 24.00 Hz to 7200 Hz 50p/50i: 50.00 Hz to 7200 Hz 25p: 25.00 Hz to 7200 Hz
Gamma	HD / FILMLIKE1 / FILMLIKE2 / FILMLIKE3/ FILM REC / VIDEO REC / HLG
White Balance	ATW : 3200K, 5600K ATW Speed : Normal / Slow / Fast AWB : AWB-A / AWB-B VAR (selectable between 2000K and 15000K by designating a value)
Chroma Amount Variability	OFF, –99 % to 99 %
Scene File	Scene1, Scene2, Scene3, Scene4

Output Format	1080/59.94p, 1080/50p, 1080/29.97p*4, 1080/29.97PsF, 1080/25p*4, 1080/25PsF, 1080/23.98p*5, 1080/24p*4, 1080/23.98p*4, 1080/23.98PsF, 1080/59.94i, 1080/50i, 720/59.94p, 720/50p
Synchronization System	Internal/External synchronization (BBS/Tri-level sync)
Input	
Input Connector	DC 12 V IN, G/L IN (BNC) • BBS (Black Burst Sync), tri-level sync supported
Output	
Video Output	HDMI HDMI 2.0 standard 4:2:2/10bit • HDCP is not supported. • Viera Link is not supported. 3G-SDI OUT SMPTE292 / 75 Ω (BNC x 1) • Level-A/Level-B supported
Input/Output	
Input/Output Connector	LAN LAN connector for IP control (RJ-45) RS-422 CONTROL IN RS-422A (RJ-45) MIC/LINE input AAC compatible (compatible with IP only) ø 3.5 mm stereo mini jack Input impedance: Approx. 10 kΩ (unbalanced) • During MIC input Supported mic: Stereo mic (plug-in power, on/off switching via menu) Supply voltage: 2.5 V ± 0.5 V Mic input sensitivity: Approx. –40 dBV (0 dB=1 V/Pa, 1 kHz) • During LINE input Input level: Approx. –10 dBV
Pan-Tilt Head Unit	
Camera/Pan-Tilt Head Control	IP connecting cable: LAN cable*6: (category 5e or above, straight cable), max. 100 m (328 ft) AW protocol connecting cable: LAN cable*6: (category 5e or above, straight cable), max. 1000 m (3280 ft)
Installation Method	Stand-alone (Desktop) or suspended (Hanging)*7
Pan/Tilt Operation Speed	Minimum speed 0.08°/s Maximum speed 60°/s or higher*8 • Maximum speed is 180°/s in high-speed mode
Panning Range	±175°
Tilting Range	–30° to 210°*9
Quietness	NC35 or less
Supported Operating Systems and Web Browsers*10	
Supported operating systems and web browsers	Windows Microsoft(R) Windows(R) 10 Windows(R) Internet Explorer(R) 11 (64-bit/32-bit) Microsoft Edge Google Chrome Mac MacOS v11.0.1 / Safari 14.01 MacOS v11.0.1 / Google Chrome MacOS V10.15 / Google Chrome MacOS V10.14 / Google Chrome iPhone / iPad iOS Google Chrome
IP Streaming	

Image Streaming Mode	JPEG (MJPEG), H.264, H.265
Image Resolution	
1920x1080, 1280x720, 640x360, 320x180	
Image Transmission Setting	JPEG Frame Rate: Maximum 30 fps, Image quality (Fine / Normal) H.264 Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port Transmission Priority: Constant bit rate, Frame rate, Best effort Frame Rate: [60Hz] 60fps / 30fps / 15fps / 5fps, [50Hz] 50fps / 25fps / 12.5fps / 5fps Max Bit Rate: 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps H.265 Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port Frame Rate: [60Hz] 60fps / 30fps, [50Hz] 50fps / 25fps Max Bit Rate: 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps NDI|HX Transmission Type: Unicast port (AUTO), Unicast port (MANUAL), Multicast port Frame Rate: [60Hz] 60fps / 30fps / 15fps / 5fps, [50Hz] 50fps / 25fps / 12.5fps / 5fps Max Bit Rate 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps SRT H.264 Transmission Type: UDP Unicast Only Frame Rate: [60Hz] 60fps / 30fps / 15fps / 5fps, [50Hz] 50fps / 25fps / 12.5fps / 5fps Max Bit Rate: 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps SRT H.265 Transimission Type: UDP Unicast Only Frame Rate: [60Hz] 60fps / 30fps / 15fps / 5fps, [50Hz] 50fps / 25fps / 12.5fps / 5fps Max Bit Rate: 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps RTMP/RTMPS Frame Rate: [60Hz] 60fps / 30fps / 15fps / 5fps, [50Hz] 50fps / 25fps / 12.5fps / 5fps, [24Hz] 24fps Max Bit Rate: 24576kbps / 20480kbps / 16384kbps / 14336kbps / 12288kbps / 10240kbps / 8192kbps / 6144kbps / 4096kbp / 3072kbpss / 2048kbps / 1536kbps / 1024kbps / 768kbps / 512kbps
Audio Compression Type	AAC-LC, 48 kHz / 16 bit / 2ch
Supported Protocol	IPv6: TCP / IP, UDP / IP, HTTP, HTTPS, DNS, NTP, DHCPv6, MLD, ICMP, ARP, RTSP/RTP IPv4: TCP / IP, UDP / IP, HTTP, HTTPS, RTSP/RTP, DHCP, DNS, DDNS, NTP, IGMP, ICMP, ARP, RTMP, RTMPS, SRT, MPEG2-TS over UDP
Other Function	
NDI Support*11	NDI | HX
Tally LED display color	red / green

Note	*1: Available in September 2021. *2: 1 dB step increments can be set. *3: This cannot be configured 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. *4: Native output. *5: It denotes “1080/23.98p over 59.94i”. *6: Use of an STP (shielded twisted pair) cable is recommended. *7: To ensure safety, the unit must be secured using the mount bracket supplied. *8: Quietness, stationary accuracy, etc., in high-speed mode may vary from normal mode. *9: Depending on the pan or tilt position, the camera may be reflected in the image. *10: Supported OS indicated are for browsers current as of October 2018. See Service and Support (https://eww.pass.panasonic.co.jp/p2ui/guest/TopLogin.do?lang=en&category=pav) for the latest information on browser support. *11: Contact your local Panasonic vendor for further information.