Panasonic CONNECT

Compact 4K PTZ Camera equipped with an ultra-wide-angle lens with a 111° field of view and perfect for fixed point shooting

4K PROFESSIONAL

zoom Certified

HDMI, LAN and USB output-compatible compact 4K PTZ Camera equipped with an ultra-wide-angle lens with a 111° field of view

Suspended (Hanging) Style

The compact 4K PTZ Camera is equipped with an ultra-wide-angle lens with a 111° field of view to capture the entire scene. The unit supports PoE* supply and can be powered via USB from a computer to realize a single cable solution for video transmission, camera control and power supply. The camera is perfect for a wide range of applications including lecture capturing, video conferencing and e-Sports live streaming.

* Abbreviation of Power over Ethernet .

Stand-alone (Desktop) Style

4K Integrated Camera
AW-UE4WG
AW-UE4KG

4K PROFESSIONAL

HDMI™ HIGH-DEFINITION MULTIMEDIA INTERFACE

zoom Certified

High-Quality 4K/30p Video Output

Supports 3840x2160/30p 4K video output and a variety of other formats for use in a wide range of environments.

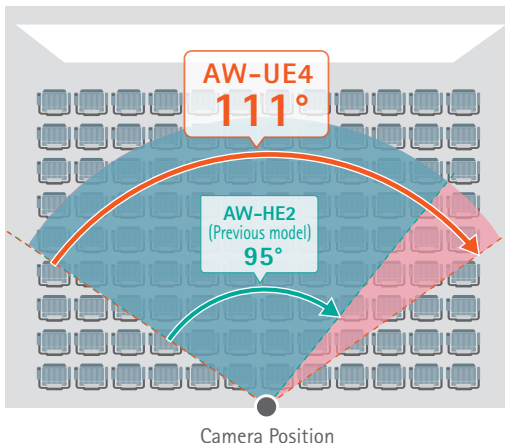* HDMI output requires PoE HUB or AC adaptor (5V/1A or more).

■ Output format

4K	2160/30p, 2160/29.97p, 2160/25p
HD	1080/60p, 1080/59.94p, 1080/50p, 1080/30p, 1080/29.97p, 1080/25p
	720/60p, 720/59.94p, 720/50p

Ultra-Wide-Angle Lens with a 111° Field of View

Equipped with an ultra-wide-angle lens with a 111° field of view to capture every part of even the largest spaces and transmit wide-angle video in limited installation space.
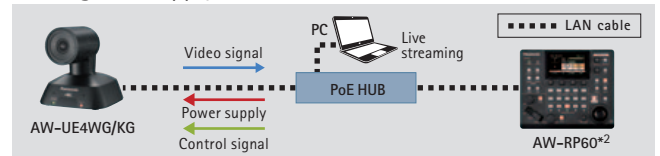
■ The 111° Field of View

AW-UE4
111°

AW-HE2
(Previous model)
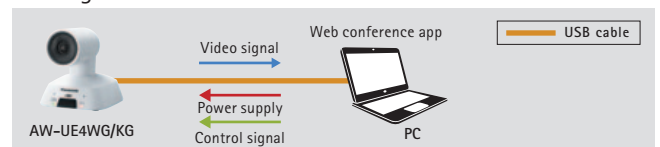**95°**

Camera Position

Single Cable Solution

In addition to PoE*[1] supply, power supply from a computer via USB cable is also supported to enable operation without connecting an AC adaptor, realizing a single cable solution for video transmission, camera control and power supply.

■ Using PoE Supply

| | | | ---- LAN cable |

PC — Live streaming

Video signal
Power supply
Control signal

AW-UE4WG/KG — PoE HUB — AW-RP60*[2]

■ Using as a USB Camera*[3]

| | | ── USB cable |

Web conference app

Video signal
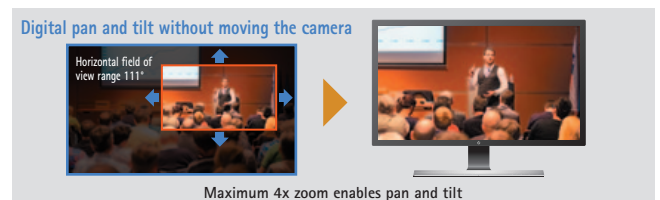Power supply
Control signal

AW-UE4WG/KG — PC

*1: Abbreviation of Power over Ethernet.
*2: Unlike when other PTZ cameras are connected, the display corresponds to the AW-UE4WG/KG menu structure. Slow Shutter, LDC, Priority Mode, Mirror and Language settings cannot be controlled. A software version update may also be required for use in some cases.
*3: "Priority Mode: USB (Video Conference)" can be used when using the Zoom. The tally lights up red during USB streaming. Software upgrade may be required to use this mode.

ePTZ

Equipped with digital zoom for magnification up to four times to capture distant subjects clearly. Once images are zoomed in, digital pan/tilt is available, offering flexibility to shoot from different angles.

Digital pan and tilt without moving the camera

Horizontal field of view range 111°

Maximum 4x zoom enables pan and tilt

* Images are simulated.

RTMP/RTMPS*1

Supports RTMP/RTMPS*1 for direct upload and streaming of video on services such as YouTube Live or Facebook Live. Video can be uploaded and streamed directly from the camera to live streaming services.

See Application 03: Live Streaming on page 4 for an example of system construction using RTMP/RTMPS.

*1: RTMP: Real-Time Messaging Protocol, RTMPS: Real-Time Messaging Protocol Secure.

▋ Rear View

▋ Optional Products

Remote Camera Controller AW-RP150*	Remote Camera Controller AW-RP60*	Infrared Wireless Remote Control AW-RM50AG
	● Separate AC adaptor or PoE HUB required.	

* Unlike when other PTZ cameras are connected, the display corresponds to the AW-UE4WG/KG menu structure. A software version update may also be required for use in some cases.

▋ Specifications

As of April, 2022

[General]

Power Requirements:	DC 5 V±5 % (4.75 V to 5.25 V)
PoE:	IEEE802.3af standard: DC37 V to 57 V
Current Consumption:	1.0A (USB input), 0.2A (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)
Weight:	Approx. 0.5 kg (1.1 lb) (excluding mount bracket)
Dimensions (W x H x D):	123 mm x 131 mm x 139 mm (4-53/64 inches x 5-5/32 inches x 5-29/64 inches) (excluding protrusions, mount bracket)
Finish:	AW-UE4WG:White AW-UE4KG:Black
Controller Supported:	AW-RP150*1, AW-RP60*1, AW-RM50AG

[Camera Unit]

Imaging Sensors:	1/2.5-type MOS
Lens:	F2.4 (f=2.21 mm, 35 mm conversion: 13.4 mm)
Digital Zoom:	4x
Field of View Range:	LDC*2 Off: Horizontal field of view 111°, vertical field of view 75°, diagonal field of view 120°
	LDC*2 On: Horizontal field of view 108°, vertical field of view 75°, diagonal field of view 116°
Focus:	Single focus
Focus Distance:	700 mm
Minimum Illumination:	4 lx (conditions: 50 IRE, gain 42 dB, shutter speed 1/60)
Horizontal Resolution:	HDMI output: 4K format: 1,400 TV lines typ (center area)
	HDMI output: HD format: 900 TV lines typ (central area)
ePTZ Angle:	2x digital zoom: Pan approx. ± 34°, tilt approx. ± 21° 4x digital zoom: Pan approx. ± 45°, tilt approx. ± 30°
Gain selection:	Auto, 0 to 42 dB *Can be set in 3 dB increments
Electronic Shutter Speed:	■ Full Auto Mode with Slow Shutter On / Shutter Priority Mode / Manual Mode 1/1, 1/2, 1/5, 1/10, 1/20, 1/30, 1/60, 1/120, 1/240, 1/480, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [60 Hz/59.94 Hz] 1/1, 1/2, 1/5, 1/10, 1/20, 1/25, 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [50 Hz]
	■ Full Auto Mode with Slow Shutter Off 1/60, 1/120, 1/240, 1/480, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [60 Hz/59.94 Hz] 1/50, 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/8000, 1/16000 [50 Hz]
White Balance:	ATW, AWB A, AWB B, 3200 K, 5600 K
Chroma Amount Variability:	11 steps (0 to 10)

[Internal Mic]

Internal Mic:	Stereo microphone
Audio On/Off:	Available (mute function)
ALC Function:	Available

[Output]

HDMI*3*4:	HDMI connector, 4:4:4/8 bit

[Input/Output]

LAN:	LAN terminal for IP control (RJ-45)
USB:	Type-C terminal

[USB Web Camera Unit]

Video Output:	USB Video Class Ver1.1	
Video Output Format:	YUV (uncompressed), MJPEG, H.264	
Resolution:	YUV	640 x 360
	MJPEG	3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360
	H.264	3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360

Frame Rate:	YUV	• When Priority Mode is USB or HDMI/USB.
		  [60 Hz/59.94 Hz]: 15fps [50 Hz]: 10fps
		• When Priority Mode is USB(Video Conference).
		  [60 Hz/59.94 Hz]: 30fps [50 Hz]: 25fps

	MJPEG	[60 Hz/59.94 Hz]:30fps*5/15fps*5/5fps [50 Hz]:25fps*5/10fps*5/5fps
	H.264	[60Hz/59.94Hz]:60fps*5, 30fps, 15fps, 5fps [50Hz]:50fps*5, 25fps, 10fps, 5fps
Audio Output:	USB Audio Class Ver1.0	
Audio Compression Format:	Linear PCM, 48 kHz/16 bit/2 ch	

[IP Streaming]

Video Compression Format:	MJPEG (HTTP), H.264 (RTSP/RTMP/RTMPS), H.265 (RTSP)	
Resolution:	MJPEG	1280 x 720, 640 x 360
	H.264/H.265	3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360
Frame Rate:	MJPEG	Max. 30fps (25fps)*6
	H.264	[60 Hz/59.94 Hz]:5fps/15fps/30fps/60fps (4K up to 30fps) [50 Hz]:5fps/10fps/25fps/50fps (4K up to 25fps)
	H.265	[60 Hz/59.94 Hz]:5fps/15fps/30fps/60fps (4K up to 30fps) [50 Hz]:5fps/10fps/25fps/50fps (4K up to 25fps)
Streaming Bitrate:	MJPEG	Not specified*6
	H.264	RTSP/RTMP:1024kbps to 32768kbps RTMPS:1024kbps to 8192kbps
	H.265	1024kbps to 32768kbps
Audio Compression Format:	AAC-LC, 48 kHz/16 bit/2 ch	
Supported Protocol:	IPv4	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DHCP, DNS, ICMP, ARP, RTMP, RTMPS, NTP
	IPv6	TCP/IP, UDP/IP, HTTP, RTSP, RTP, RTP/RTCP, DNS, ICMPv6, NTP

[Pan-tilt Unit]

Installation Method:	Stand-alone (Desktop) or suspended (Hanging)*7
Panning Range:	±110° (manual)
Tilting Range:	±25° (manual)

[Camera Control]

IP Connecting Cable:	▪ When a PoE ethernet hub is used: LAN cable*8 (category 5e or above), max. 100 m (328 ft) ▪ When a PoE ethernet hub is not used: LAN cable*8 (category 5 or above), max.100 m (328 ft)

[Standard Accessories]

USB Cable: 1, Drop-prevention wire: 1, Mount kit: 1, L-Mount kit: 1, Tripod screw (I-head type, 1/4 x 20 UNC): 1,M4 screw (10 mm length) : 4, M4 screw (5 mm length): 4

● For PC operating and communication environments, see Service and Support on the Panasonic website, https://pro-av.panasonic.net/en/

*1: Unlike when other PTZ cameras are connected, the display corresponds to the AW-UE4WG/KG menu structure. A software version update may also be required for use in some cases. *2: LDC is the abbreviation for Lens Distortion Correction. *3: HDCP not supported. *4: VIERA Link not supported. *5: Excluding 3840 x 2160. *6: JPEG and H.264, H.265 simultaneous operation supported. *7: To ensure safety, the unit must be secured using the mount bracket supplied. *8: STP (Shielded Twisted Pair) recommended.
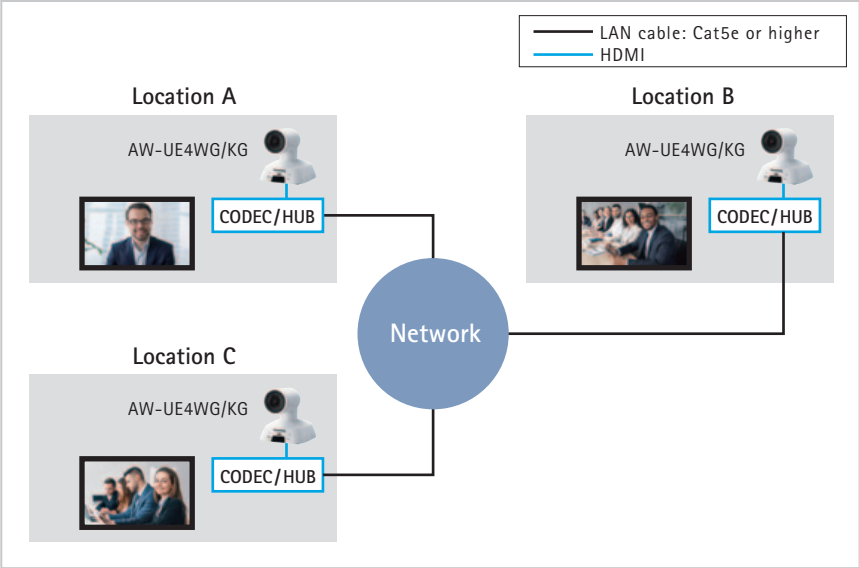
3

Application 01 : Online Meetings

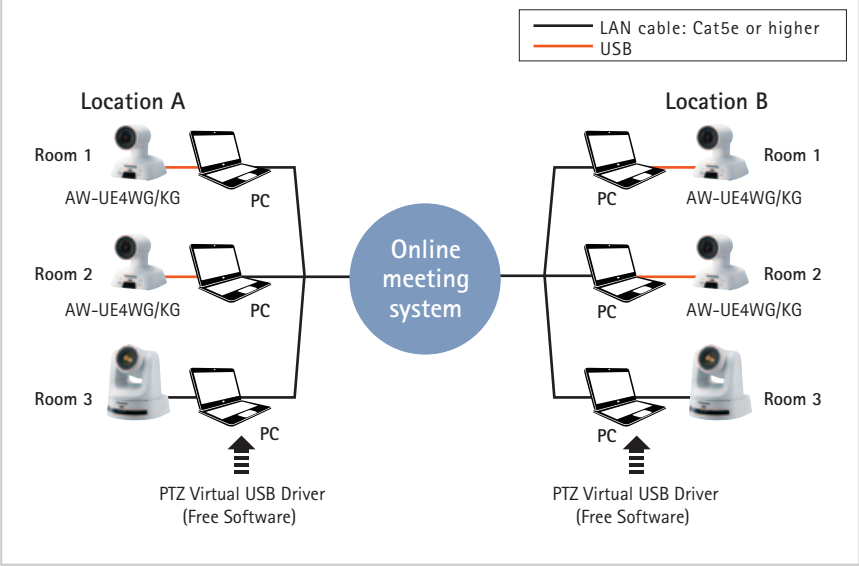### Online meetings with even greater realism

The compact AW-UE4WG/KG can be installed in meeting rooms with limited space. The ultra-wide-angle lens captures every part of the room, even in meetings with numerous participants.

— LAN cable: Cat5e or higher
— HDMI

Location A
AW-UE4WG/KG
CODEC / HUB

Location B
AW-UE4WG/KG
CODEC / HUB

Location C
AW-UE4WG/KG
CODEC / HUB

Network

Application 02 : Online Meetings / Online Seminars

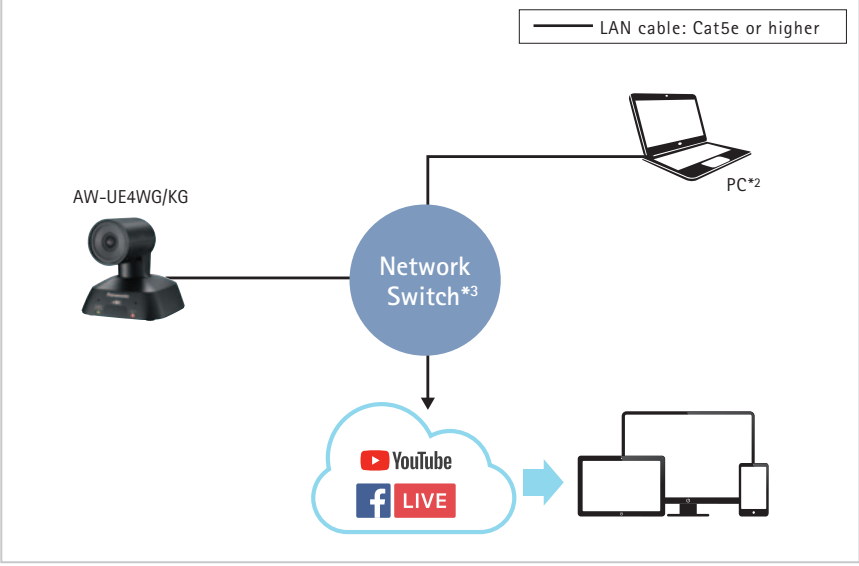### Online meetings with high-quality video made easy

The AW-UE4WG/KG supports USB Video Class, which enables video and audio output via USB. Other 4K/HD Integrated Cameras can also be used as USB cameras through the PTZ Virtual USB Driver (freeware).

— LAN cable: Cat5e or higher
— USB

Location A
Room 1
AW-UE4WG/KG
PC

Room 2
AW-UE4WG/KG
PC

Room 3
PC

PTZ Virtual USB Driver
(Free Software)

Location B
PC
Room 1
AW-UE4WG/KG

PC
Room 2
AW-UE4WG/KG

PC
Room 3

PTZ Virtual USB Driver
(Free Software)

Online meeting system

Application 03 : Live Streaming

Compact systems for live streaming

The AW-UE4WG/KG features RTMP/RTMPS[1] for direct upload of video to live streaming services from the camera, enabling the creation of simple live streaming systems without complex setups. This is ideal for e-sports and other live events.

— LAN cable: Cat5e or higher

AW-UE4WG/KG

PC[2]

Network Switch[3]

YouTube
LIVE

[1]: RTMP: Real-Time Messaging Protocol, RTMPS: Real-Time Messaging Protocol Secure.
[2]: A computer is required for connection to the streaming server.
[3]: A Network switch with PoE support is required for the power supply.

▌ PC Software for Remote Camera Support

Supporting Lecture Capture with Auto Tracking function

Auto Tracking Software Key

Stand-Alone and Web App Versions

AW-SF100*1

Server Version

AW-SF200*1

2 Additional Licenses (for AW-SF200)

AW-SF202*1

3 Additional Licenses (for AW-SF200)

AW-SF203*1

90-day Free Trial Available

Free trial
https://pro-av.panasonic.net/en/
software/aw-sf100g/

- The AW-UE4WG/KG can be added as a wide-angle camera using the wide-angle camera link function. As long as the wide-angle camera is capturing the subject, even if the tracking camera loses the tracking subject, it can be discovered immediately and tracking can resume.
- Operation with IP connection enables installation/control of cameras in remote classroom.
- AW-SF100 allows a single PTZ camera to be controlled on either a stand-alone or web application version. AW-SF200 operates on a server.
- The web application version enables camera control from a tablet, smartphone, desktop PC, etc.
- AW-SF200 enables simultaneous auto tracking and centralized control of multiple cameras.*2

*1: Use may require a software version update.
*2: Up to four cameras per server can be controlled simultaneously.
* The AW-UE4WG/KG cannot be used as a tracking camera. It can be used as a wide-angle camera. * Depending on the shooting environment, the system may not be able to detect or track the target correctly. Please use this software in an environment where the adjustment work can be performed by the operator to deal with errors in detection and auto tracking. * There is a 90-day free trial available for the Auto Tracking Software. Please read carefully the precautions for this software and check if it works correctly in your operating environment before you purchase "Auto Tracking Software Activation Key". For further information, please see "Download / Software Download" on the Panasonic website < https://pro-av.panasonic.net/ >.
- The face recognition function is based upon the face recognition software developed by Panasonic Connect Co., Ltd.

AW-SF100 / SF200 Main View

GUI screen that enables the subject of multiple PTZ Cameras to be switched with a single click of an icon

Visual Preset Software Key

AW-SF300
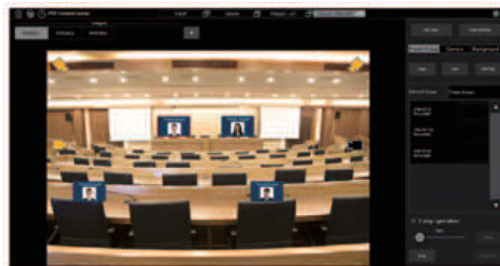
90-day Free Trial Available

Free trial
https://pro-av.panasonic.net/en/
software/aw-sf300/

- GUI screens can be set for each shooting location and Preset Groups with registered subject positions can be managed.
- All cameras registered in a group can be directed toward the subject with a single press of the Preset Group icon on the GUI screen.
- Camera positions are displayed as icons on the GUI screen. The icons of cameras in the currently selected Preset Group are highlighted, enabling the user to see which cameras are shooting at a glance.
- Operation using a PC mouse and GUI screen provides ease of use for users who are unfamiliar with the operation of video equipment.

AW-SF300 Main View

* EasyIP Setup Tool Plus is included with this product and does not need to be installed separately. * PTZ Control Center must be downloaded before using this product.

Control multiple PTZ Cameras from PC

PTZ Control Center   [Free software]

- Video can be checked during centralized management of multiple cameras.
- Camera control enabled via GUI for image quality adjustment, pan, tilt, zoom, etc. Touch panel operations are supported.
- Clicking the preset button attached to thumbnails enables simple recall of presets.
- Pan, tilt, zoom and other operations can also be controlled using game controllers made by other companies.

Main screen

Software that converts PTZ camera on your network into Super Web cam

PTZ Virtual USB Driver   [Free software]

- Remote cameras on the network can be used as USB cameras for simple execution of web meetings with high image quality.
- Camera controls such as image quality adjustment and pan/tilt/zoom can be operated from the GUI.
- Up to five cameras can be registered.
- Automatic detection of connected cameras and network settings enabled.
- Linking with the video recording and distribution service Panopto enables camera operation through the Panopto GUI.
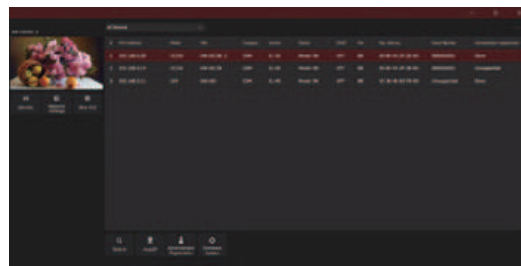
* For further information on Panopto, please visit Panopto Website < https://www.panopto.com >.

Freeware to support efficient setup and operation of PTZ Cameras

EasyIP Setup Tool Plus   [Free software]

- Panasonic PTZ Cameras connected to a PC are detected and centralized display and management of camera information such as IP addresses and version numbers can be performed.
- The network setting information of specific PTZ Cameras can be modified from the GUI screen.
- PTZ Cameras can be selected and controlled from a browser GUI.
- Auto IP: Multiple PTZ Cameras can be selected and assigned consecutive IP addresses.
- Firmware Update: PTZ Camera firmware updates can be performed automatically through the tool.*1
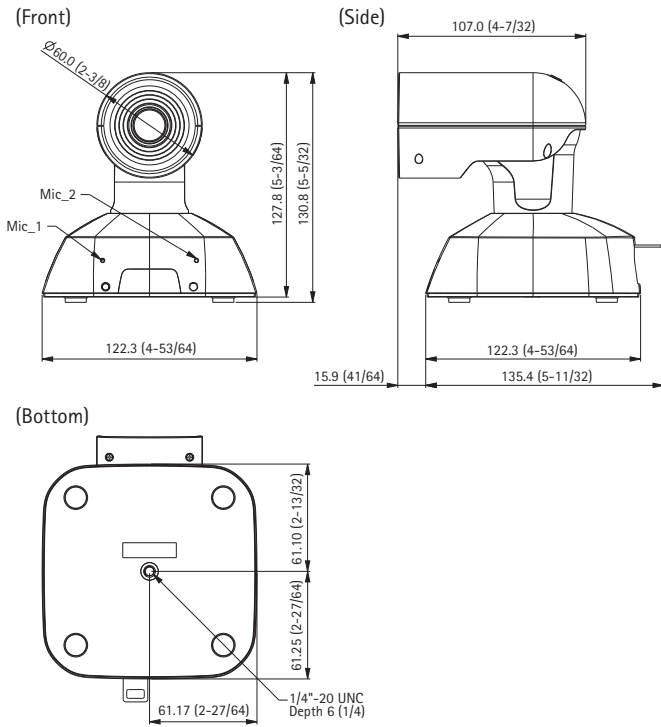
Connected camera information can be checked at a glance on the main screen

*1: PC must be connected to the internet. * This product is included with the AW-SF300 Visual Preset Software Key and PTZ Control Center and does not need to be installed separately.

* For further information, please see < https://pro-av.panasonic.net/en/products/ptz_camera_systems.html >.

Dimensions

Unit:mm (inches)

(Front)

Ø60.0 (2-3/8)

Mic_2
Mic_1

127.8 (5-3/64)
130.8 (5-5/32)

122.3 (4-53/64)

(Side)

107.0 (4-7/32)

122.3 (4-53/64)
15.9 (41/64)
135.4 (5-11/32)

(Bottom)

61.10 (2-13/32)
61.25 (2-27/64)
61.17 (2-27/64)

1/4"-20 UNC
Depth 6 (1/4)

Compatible Third-Party Equipment

NETGEAR, Inc
ProSAFE® 8-Port 10/100/1000 PoE+ Smart Switch
with 2 Gigabit SFP Ports

GS510TPP
* Operation-verified in Mar. 2020

PoE+

Third-Party Inquiries <NETGEAR, Inc> http://www.netgear.com/home/contact-us/

See the Panasonic website for information on compatible third-party equipment.
https://pro-av.panasonic.net/en/support/

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UKAS
MANAGEMENT
SYSTEMS

EC98J2010   0051

Factories of Panasonic Connect Co., Ltd. have received
ISO14001:2015-the Environmental Management System
certification. (Except for 3rd party's peripherals.)

For more information, please visit Panasonic web site
https://pro-av.panasonic.net/en/qr/

**Broadcast and
Professional
AV Website**

Contact Information

Facebook

Mobile App

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