# Panasonic BUSINESS

AW-UE70W [White Model]
AW-UE70 K [Black Model]
4K Integrated PTZ Camera

For indoor use



# Capture and Deliver the Moment with 4K over IP



## 4K image quality gives greater depth to the video, and IP video output flexibly delivers content



The compact AW-UE70W/K integrated pan-tilt remote camera can output 4K video via HDMI, USB and IP transmission. By introducing technological capabilities developed in our 4K cameras for movie production and TV station use, we created the AW-UE70W/K as a 4K integrated camera that can be effectively used in a variety of environments. It achieves 4K shooting in situations where higher image quality is necessary, such as lecture recordings and conference, wedding and funeral hall content production.



## A four-drive lens system for high-image-quality zooming in 4K shooting

With the four-drive lens system, three zoom lenses and one focus lens are driven independently and simultaneously. Since the four groups of lenses can be driven separately, we were able to efficiently minimize the size and drive range of each lens and thereby achieve a smaller body and a zoom mechanism with high magnification and high image quality. Despite its compact size, the AW-UE70W/K has a high-resolution 20x optical zoom and a high-performance iA 22x zoom (4K mode).



\* Images are simulated.

## Four types of output connectors. 4K output via HDMI, USB and LAN.

On the back of the unit, there are four types of output connectors which are HDMI, SDI, USB and LAN. 4K video output can be done not only via HDMI, but also via USB and LAN. This makes it possible to build a flexible system matching the specific objectives and environment.

#### Supported formats with each output connector

НДМІ	2160/29.97p,2160/25p,1080/59.94p,1080/50p,1080/59.94i,1080/50i,1080/29.97PsF,1080/25PsF,1080/29.97p, 1080/25p,720/59.94p,720/50p
SDI	1080/59.94p,1080/50p,1080/59.94i,1080/50i,1080/29.97PsF,1080/25PsF,1080/29.97p,1080/25p,720/59.94p, 720/50p
USB	2160/5p,1080/30p,1080/25p,1080/15p,1080/12.5p,1080/5p,720/30p,720/25p,720/15p,720/12.5p,720/5p, 360/30p,360/25p,360/15p,360/12.5p,360/5p
LAN	For details, please see "List of Supported Multi-Streaming Outputs" on page 4.

#### 1/2.3-type MOS Sensor

Equipped with a 1/2.3-type MOS sensor and DSP (Digital Signal Processor) for high sensitivity and high resolution.

#### High Performance Optical 20x Zoom Lens/ Super Resolution 30x Zoom

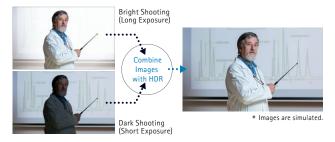
In addition to a 20x optical zoom, the AW-UE70W/K series can zoom up to 30x (22x when in 4K mode) while maintaining high resolution thanks to Super Resolution technology. It also features a 12x digital zoom\*1 and a 1.4x, 2.0x, 4.0x, 6.0x, and 8.0x digital extender zoom which can be used for 4K focus assist. These capabilities enable the AW-UE70W/K series to shoot in large conference halls and classrooms.



#### Equipped with High Dynamic Range (HDR) Mode\*2

\*Images are simulated

In addition to conventional Dynamic Range Stretch (DRS) and Digital Noise Reduction (DNR), the AW-UE70W/K is equipped with High Dynamic Range (HDR) mode. When shooting and synthesizing two images with differing exposure times, the AW-UE70W/K can create video with high visibility that corrects for halation and black defects even under backlit conditions.



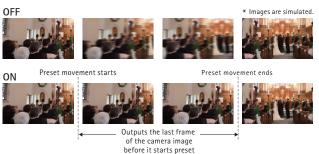
## Optical (FHD, 4K)/4-axis Hybrid Image Stabilizer (FHD) for Stable Shooting

Image shake is reduced with both optical and digital 4-axis automatic stabilization that detects mounting surface vibration caused by audio equipment and opening/closing doors.

#### Outputs Still Image During Preset Movements; Supports One-Camera Operations

The Freeze During Preset function enables to freeze the video during preset playback. The immediately preceding still image is output during preset movements so that the swiveling movement is not displayed, making operations possible with one camera.

#### With Freeze During Preset function OFF and ON



#### Night Mode (supports automatic switching)

Switching to Night Mode makes shooting possible even in low light conditions in which shooting is normally difficult, such as when observing wildlife\*3. The AW-UE70W/K can also be set to switch to the mode automatically depending on surrounding light levels.



\* Images are simulate

#### Optical ND Filter

There is an optical ND filter for adjusting to optimum brightness under a variety of light intensities.

#### **Audio Input Function**

The AW-UE70W/K also supports audio input, embedding and encoding. Audio output to IP is also supported. The ALC (Audio Automatic Level Control) in the AW-UE70W/K can be switched ON/OFF and an equalizer function can be used. By reducing low-frequency sound from air conditioners, projectors, and other devices, it is possible to emphasize and increase the clarity of the spoken words.

#### Both SDI and HDMI are Supported, and There is Also an External Synchronization Signal\*<sup>4</sup> Input Connector



For SDI/HDMI output, 2160/29.97p (HDMI only), 2160/25p (HDMI only), 1080/59.94p, 29.97p, 59.94i, 29.97PsF, 1080/50p, 25p, 50i, 25PsF, 720/59.94p, and 50p image formats are supported. In addition, there is an external synchronization signal input connector, and BBS (Black Burst Sync) and tri-level synchronization are supported.

#### Video/Audio Output with USB



USB Video Class 1.0 and USB Audio Class 1.0 are supported. This enables video and audio output via USB so the cameras can be used as high-image-quality Web cameras for Web conferencing, distance learning, and other applications utilizing communication software.

#### MicroSD Card Recording Function\*5



Camera video and audio can be recorded in MP4 format on microSD card (sold separately) inserted into the unit. In

addition, using an IP network, it is possible to externally control recording start/stop and download the recorded files.



#### Supported formats for micro SD (recording):

 $2160/29.97 p, 2160/25 p, 1080/59.94 p, 1080/50 p, 1080/29.97 p, \\ 1080/25 p, 720/59.94 p, 720/50 p, 720/29.97 p, 720/25 p$ 

- \*1: Picture quality is lower with the digital zoom.
- \*2: Cannot be used when in 4K mode
- \*3: Video output is monochrome.
- \*4: External synchronization synchronizes with SDI video signals. It does not synchronize with HDMI video signals or IP video signals.
- \*5: There may be instances where it is not possible to record in the same format as the output video.

#### Full HD Video Output Via IP Transmission \*1



In addition to HDMI, SDI and USB output, production quality 4K/fullHD video output via IP transmission is supported. For 4K video output via IP transmission, there can be one channel of IP video output of up to 30 frames/second. At full HD image quality, IP video output up to 60 frames/second is possible. One camera delivers up to four channels\*1 of IP streaming video (H.264), and simultaneous transmission to as many as 14 devices is supported\*2, so that flexible system setup is possible to meet various application needs.



### List of Supported Multi-Streaming Outputs (When priority mode "IP" or "IP (4K)" is selected)

Catalogue		H.264				JPEG				
Settings			CH1	CH2*3	CH3*3	CH4*4	CH1	CH2	CH3	
	IP selected  IP (4K) selected		1920×1080 1280×720*3 640×360*5	1280×720 640×360 320×180			1920×1080* <sup>4</sup> 1280×720* <sup>3</sup> 640×360 320×180 <sup>*3</sup>			
			3840×2160	-			640×360 320×180			
1	IP	59.94 Hz	60/30/15/5 fps		30/15/5 fps		30/15/5 fps			
Frame	selected	50 Hz	50/25/12.5/5 fps	25/12.5/5 fps			25/12.5/5 fps			
rate	IP (4K)	59.94 Hz	30/15/5 fps	-			15/5 fps	-		
S	selected	50 Hz	25/12.5/5 fps	-		12.5/5 fps	-			
Bit rate			Up to 50 Mbps at 4K or up to 24 Mbps otherwise							
Voice transmission			Yes (AAC48 KHz)							
PoE+			Yes							

<sup>\*</sup>Depending on the output mode, certain restrictions apply.

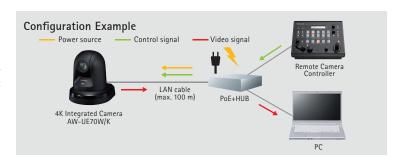
#### NDI HX Compatibility for Excellent Video Streaming Quality

The AW-UE70W/K can be upgraded to an NDI|HX compatible model if purchasing a license from the NewTek website (https://pro-av.panasonic.net/en/ndihx\_support/index.html). Highly efficient NDI HX compatibility enables excellent broadcast streaming by encoding and transmitting high-quality video in real time. This technology eliminates the need for IP decoders, allowing input to be sent directly to the switcher.

#### System Configuration AC Adaptor NDI | HX Supported Connection AV-HIC100 Live Streaming Service PoE+HUB \* Power over Ethernet Plus, IEEE 802,3at

#### Supporting PoE+\*6 for Lower Installation Costs

By connecting network devices that support the IEEE802.3at PoE+ standard, power can be supplied via LAN cable. Since it is not necessary to install a power supply or even a local AC outlet, installation costs can be significantly reduced.



#### IP Control with Image Monitoring Using PC, Mac and Mobile Terminals

Using an IP browser, the camera can be controlled from a remote location, and IP video monitoring and remote camera control can be performed from a PC, Mac or mobile terminal such as an iPhone, iPad or Android device, enabling easy operations.

\*For the latest information on supported OS/browsers, please refer to the "service and support" section on the Panasonic website (https://pro-av.panasonic.net/en/).

#### Camera Control Screen (PC)

Live Screen

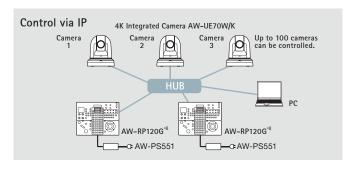


Mobile Terminal Screen

\*Images are simulated

#### Flexible IP Control Architecture Simplifies System Design and Operation\*7

Up to 100 x AW-UE70W/K cameras can be controlled via IP from a single AW-RP120G/RP50 or PC. An AW-UE70W/K can also be simultaneously controlled by up to five AW-RP120G/RP50's via IP.



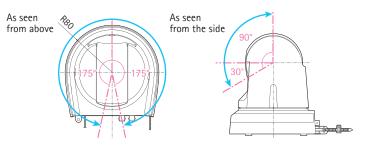
<sup>\*</sup> Contact your local Panasonic vendor for further information.

<sup>\*1: 1920</sup> x 1080 60 fps output is 1ch display only. For 2ch or more, display is max. 30 fps. Also, JPEG output is up to 3ch. \*2: Depends on your network environment.
\*3: Settable when HDR is "Off". \*4: Settable when HDR is set to "Off" and the frame rate is other than 60fps (or 50fps). \*5: Not settable when HDR is "Off". \*6: Abbreviation of Power over Ethernet Plus.
\*7: Controller upgrade required. For details, please refer to the "service and support" section on the Panasonic website (https://pro-av.panasonic.net).

<sup>\*8:</sup> AC adaptor AW-PS551 (sold separately) is required for AW-RP120G.

## Exceptional Pan-tilt Performance for Smooth Shooting Over a Wide Area\*1

The pan range of  $\pm 175^{\circ}$  and the tilt range of  $-30^{\circ}$  to  $+90^{\circ}$  cover a wide shooting area\*1. Pan and tilt operate at a maximum speed of  $90^{\circ}$ /second and respond quickly to remote control operation. They operate quietly at a sound level of NC35 or lower.



\*1: Depending on the position of the pan and tilt, the unit itself may be reflected in the image.

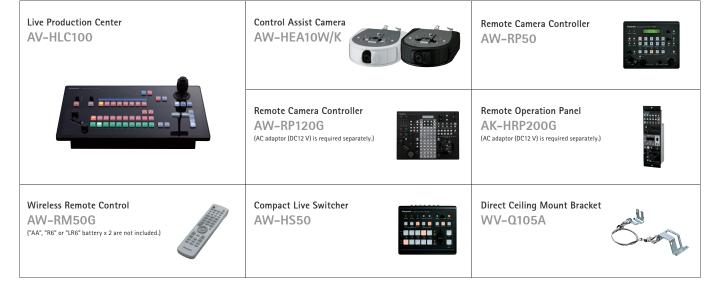
#### Other Functions

- Preset memory up to 100 positions.
- Functions such as freeze during preset, digital extender zoom and color temperature settings can be assigned to the user buttons on Panasonic controllers
- Equipped with RS422 remote terminal; up to five units can be controlled via serial control from a controller.
- Equipped with RS232C remote terminal (standard serial communication support). Up to seven units can be controlled via daisy chain connection.
- Up to four units can be operated with a wireless remote controller (AW-RM50G sold separately).
- Easy installation thanks to use of turn-lock mechanism.



System Camera Options

As of April, 2018

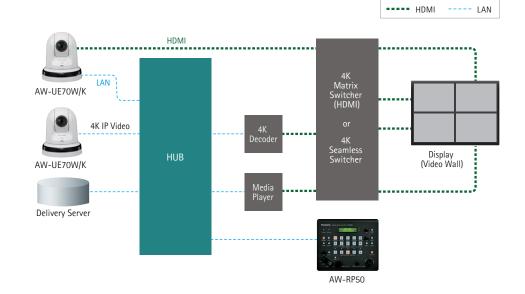


#### Application 01: Signage

### Signage that expresses the mood of the location by 4K video

Place AW-UE70W/K cameras in a large commercial facility or event venue to record the live footage. You can then show 4K video on a large video wall. By splitting the screen display, you can show video from a variety of spots.



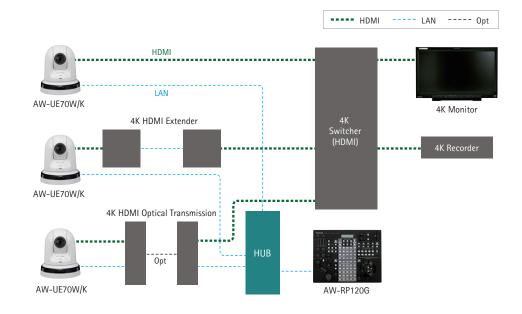


#### Application 02: Video Production

### Production of 4K video using compact remote cameras

Efficiently add AW-UE70W/K cameras to a 4K switcher of an existing studio. This allows you to build a compact 4K program production system capable of handling professional uses while achieving good cost performance.



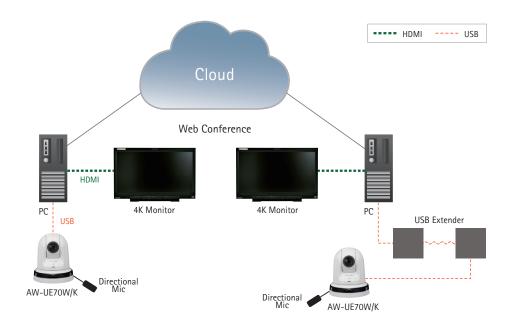


#### Application 03: Web Conferencing

## Web conferences with high-definition views from the venue as a whole to individual speakers

Set up AW-UE70W/K cameras to achieve high-resolution zooming in 4K/HD at web conferences. Catch the big picture with high-definition video that shows all the details including the expressions of individual speakers by high-resolution zooming. That way, you can shoot conference video that gives a feel of almost like being there.





**Specifications** As of April, 2018

-	Power requirements		plied AC adaptor)		Output format			2160:29.97p/25p (HDMI only)		
			7 V (PoE+ power supply)					1080:59.94p/50p		
	Current consumption		ed AC adaptor)				HD	1080:59.94i/50i		
			power supply)					1080:29.97p/25p		
	Ambient operating tempera			_				1080:29.97PsF/25PsF		
	Storage temperature		°C (-4 °F to 122 °F)	_	Synchronization	n cyctem	Internal cun	720:59.94p/50p nchronization/External synchronization (BBS,	Tri level cync)	
GENERAL			20 % to 90 % (no condensation)		Image stabiliza			D, 4K)/4-axis hybrid image stabilizer (FHD) f		
	Mass		Approx. 1.5 kg (3.30 lb)					depending on the operating environment.	or studie	
			36 mm x 179 mm		Video output			Class Ver1.0		
	Dimensions (W x H x D)		(6-5/16 inches x 7-41/128 inches x 7-3/64 inches)		Video compression format		Motion JPE			
			rotrusions, direct ceiling mount bracket]		Resolution		1920 x 1080	0, 1280 x 720, 640 x 360		
	Finish		Pearl white		F .		max 30 fps	(59.94 Hz)		
	0		[AW-UE70 K] Metallic black		Frame rate		max 25 fps			
	Controller supported*1		W-RP120G, AK-HRP200G, AK-HRP1000GJ, AK-HRP1005GJ PoE+ (IEEE802.3at standard)	_	Audio output		USB Audio Class Ver1.0			
	Power		jack (ø3.5 mm)	_	Audio compression format			, 48 kHz, 16-bit, 2 channels		
			ance: Approx. 2 kΩ (unbalanced)				3840x2160			
		[Mic input]	ance. Approx. 2 kt// (unbalanceu)		Transfer modes	(JPEG)		ifps, 50 Hz: 5fps		
			icrophones: Stereo mic					/1280x720/640x360		
INPUT	Mic/line input		ver, on/off switching via menu)		Supported mod	alc	59.94 Hz: 30fps/15fps/5fps, 50 Hz: 25fps/12.5fps/5fps  Devices standardly equipped with a USB 2.0 compatible port			
	wite/iiiie iiiput		tage: 2.5 V ± 0.5 V				DEVICES STA	nuarury equipped with a 038 2.0 compatible	port	
			vel: -60 dBV ± 3 dBV (0 dB=1 V/Pa,1 kHz)		[Pan-tilt head unit] Installation method		Stand-alone	e (Desktop) or suspended (Hanging)*5		
		[Line input]	10. 00 db4 <u>1</u> 3 db4 (0 db-1 4)1 d,1 k112)					peed during preset: 300°/s		
			-10 dBV ± 3 dBV		Pan/tilt operati	on speed		peed during manual: 90°/s		
G/L IN			urst Sync) signal and tri-level sync supported (BNC x 1)	_	Panning range		±175°			
O/L IIV				_	Tilting range		-30° to 90°*			
OUTPUT	Video HDMI		HDMI connector  * HDCP is not supported. * VIERA Link is not supported.		Quietness			et: NC40 or less		
001101	output 3G/HD-SDI		ith the SMPTE424/SMPTE292M standards/75 Ω(BNC x 1)					ual: NC35 or less		
	· · · · · · · · · · · · · · · · · · ·		tor for IP control (RJ-45)	_	[Camera/par	n-tilt head				
	LAN		th straight/crossover cable auto detection function	FUNCTIONS				ecting through a hub: 7 (category 5 or above),max. 100 m (328 ft)		
INPUT/	Input/ Output RS-232C		Mini DIN 8-pin (IN) Mini DIN 8-pin (OUT)					a PoE+ hub:		
OUTPUT	connector RS-422	CONTROL IN	RS422A (RJ-45)	PERFORMANCE	IP connecting of	able		<sup>7</sup> (category 5e or above),max. 100 m (328 ft)		
	USB	Mini-B port	Mini-B port				When a hub	is not used:		
	SD card	microSD car	d slot					7 (category 5 or above),max. 100 m (328 ft)		
					AW protocol connecting cable					
	[Camera unit]				AW protocol con	necting cable	LAN cable*7	(category 5 or above,straight cable), max. 10	000 m (3280 ft)	
	Imaging sensors	1/2.3-type N			Standard proto	col			000 m (3280 ft)	
	Imaging sensors	Motorized 2	0x zoom, F1.8 to F3.6		Standard proto connecting cab	col le		/ (category 5 or above,straight cable), max. 10 pin cable, male	000 m (3280 ft)	
		Motorized 2 [f=4.08 mm	0x zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)		Standard proto- connecting cab	col le cording]	Mini DIN 8-	pin cable, male	000 m (3280 ft)	
	Imaging sensors Lens	Motorized 20 [f=4.08 mm equivalent: 2	Dx zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) 19.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]		Standard protoconnecting cab  [SD card recording ca	col le cording]	Mini DIN 8-	pin cable, male  /C file standard compliant (.MP4)	000 m (3280 ft)	
	Imaging sensors Lens Focus	Motorized 20 [f=4.08 mm equivalent: 2 Switching be	Ox zoom, F1.8 to F3.6 [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) 9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual		Standard proto- connecting cab [SD card rec SD card recordi Video compress	col le cording] ing sion format	Mini DIN 8- MPEG-4 AV MPEG-4 AV	pin cable, male  /C file standard compliant (.MP4)  C/H.264 High Profile	000 m (3280 ft)	
	Imaging sensors Lens	Motorized 20 [f=4.08 mm equivalent: 2 Switching be Entire zoomi	0x zoom, F1.8 to F3.6 [5]32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) !9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft)		Standard protoconnecting cab  [SD card recording ca	col le cording] ing sion format	Mini DIN 8- MPEG-4 AV MPEG-4 AV AAC-LC (48	pin cable, male  //C file standard compliant (.MP4)  //C/H.264 High Profile  kHz, 16 bit, 2 ch, 128 kbps)		
	Imaging sensors  Lens  Focus  Focus distance	Motorized 20 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10	0x zoom, F1.8 to F3.6 [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) 9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft) to (0.33 ft)		Standard proto- connecting cab [SD card rec SD card recordi Video compress	col le cording] ing sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/	pin cable, male I/C file standard compliant (.MP4) (C/H. 264 High Profile LHz, 16 bit, 2 ch, 128 kbps) 29.97p (Up to 72 Mbps), 1920x1080/59.94p (U	p to 28 Mbps),	
	Imaging sensors  Lens  Focus  Focus distance  Color separation	Motorized 20 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10	0x zoom, F1.8 to F3.6 [5]32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) !9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft)		Standard proto- connecting cab [SD card rec SD card recordi Video compress	col le cording] ing sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080/	pin cable, male  //C file standard compliant (.MP4)  //C/H.264 High Profile  kHtz, 16 bit, 2 ch, 128 kbps)  //29.97 (Up to 72 Mbps), 1920x1080/59.94p (U //29.97p (Average 15 Mbps/Average 10 Mbps)	p to 28 Mbps),	
	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system	Motorized 21 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colo	Ox zoom, F1.8 to F3.6 [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) 9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] ttween auto and manual ng range:1.5 m (4.92 ft) to m (0.33 ft)		Standard proto- connecting cab [SD card rec SD card recordi Video compress	col le cording] ling sion format sion format	MPEG-4 AV MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080/ 1280x720/5	pin cable, male  (C file standard compliant (.MP4)  (C/H.264 High Profile  1842, 16 bit, 2 ch, 128 kbps)  729.97p (Up to 72 Mbps), 1920x1080/59.94p (U  729.97p (Average 15 Mbps/Average 10 Mbps)  59.94p (Average 15 Mbps)	p to 28 Mbps), (Average 6 Mbps),	
	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system	Motorized 21 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colo 0.7 lx (50 IRI	Ox zoom, F1.8 to F3.6 [5/32 inches]; 35 mm (1-3/8 inches) (9/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)) tween auto and manual ng range:1.5 m (4.92 ft) com (0.33 ft) or filter system [5, F1.8, 48 dB,1/60 without accumulation)		Standard proto- connecting cab [SD card rec SD card recordi Video compress Audio compress	col le cording] ling sion format sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080/ 1280x720/5	pin cable, male  //C file standard compliant (.MP4)  //C/H.264 High Profile  kHtz, 16 bit, 2 ch, 128 kbps)  //29.97 (Up to 72 Mbps), 1920x1080/59.94p (U //29.97p (Average 15 Mbps/Average 10 Mbps)	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps)	
	Lens Lens Focus Focus distance Color separation optical system Minimum 59.94 Hz	Motorized 21 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colo 0.7 lx (50 IRI 0.35 lx (50 II	Ox zoom, F1.8 to F3.6 [5/32 inches]; 35 mm (1-3/8 inches) 9.9.5 mm (1-5/22 inches) to 612.0 mm (24-3/32 inches)] etween auto and manual ng range:1.5 m (4.92 ft) 0 cm (0.33 ft) or filter system E. F1.8, 48 dB,1/60 without accumulation] RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB]]		Standard proto- connecting cab [SD card rec SD card recordi Video compress Audio compress	col ole cording] ing sion format sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840×2160/ 1280×720/5 1280×720/5 3840×2160/	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I kHz, 16 bit, 2 ch, 128 kbps)  29.97p (Up to 72 Mbps), 1920x1080/59.94p (U //29.97p (Average 15 Mbps/Average 10 Mbps/S9.94p (W //29.97p (Average 15 Mbps/),  29.97p (Average 8 Mbps/Average 4 Mbps/Average)	p to 28 Mbps), (Average 6 Mbps), : 2 Mbps/Average 1 Mbps) Mbps),	
	Lens Focus Focus distance Color separation optical system Minimum 59.94 Hz	Motorized 21 [f=4.08 mm equivalent: 2 Switching 26 Entire zoomi Wide end: 10 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 IRI 0.7 lx (50 IRI	Ox zoom, F1.8 to F3.6 [6/32 inches] to F1.6 [6/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) 19.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft) com (0.33 ft) or filter system [6.7] ft, F1.8, 48 dB,1/30 with accumulation] RE, F1.8, 48 dB,1/30 with accumulation [Frame Mix 6 dB]] F1.8, 48 dB,1/30 without accumulation]		Standard proto- connecting cab [SD card rec SD card recordi Video compress Audio compress	col le cording] ling sion format sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080, 1280x720/2 3840x2160/ 1280x720/2 3840x2160/ 1920x1080, 1280x720/5	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  IkHz, 16 bit, 2 ch, 128 kbps)  29.97p (Up to 72 Mbps), 1920x1080/59.94p (U 29.97p (Average 15 Mbps/Average 10 Mbps/Sp.94p (Average 15 Mbps/Average 15 Mbps/Deverage 15 Mbps/Deverage 15 Mbps/Average 10 Mbps/Average 15 Mbps/Average 10 Mbps/Average 15 Mbps/Aver	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz	Motorized 21 [f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colo 0.7 lx (50 IRI 0.35 lx (50 III 0.35 lx (50 III 0.35 lx (50 III	Ox zoom, F1.8 to F3.6 [5/32 inches]; 35 mm (1-3/8 inches) 9.9.5 mm (1-5/22 inches) to 612.0 mm (24-3/32 inches)] etween auto and manual ng range:1.5 m (4.92 ft) 0 cm (0.33 ft) or filter system E. F1.8, 48 dB,1/60 without accumulation] RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB]]		Standard proto connecting cab [SD card rec SD card record] Video compress Audio compress Recording format /Bit rate	col ole cording] ing sion format sion format	MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080, 1280x720/2 3840x2160/ 1280x720/2 3840x2160/ 1920x1080, 1280x720/5	pin cable, male  (C file standard compliant (.MP4)  (C/H.264 High Profile  1842, 16 bit, 2 ch, 128 kbps)  29.97p (Up to 72 Mbps), 1920x1080/59.94p (U  29.97p (Average 15 Mbps/Average 10 Mbps,  59.94p (Average 15 Mbps/Average 4 Mbps/Average)  29.97p (Average 8 Mbps/Average 4 Mbps/Average)  25p(Up to 72 Mbps), 1920x1080/50p(Up to 28)  (25p(Average 15 Mbps/Average 10 Mbps/Average)	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
	Lens Focus Focus distance Color separation optical system  Minimum illumination 59.94 Hz Horizontal resolution	Motorized 2t [f=4.08 mm equivalent; 2 Switching be Entire zoomi Wide end: 10 0.7 lx (50 IRI 0.35 lx (50 III 0.35 lx (50 III 0.45 lx (50 III 0.45 lx (50 III 0.45 lx (50 III 0.45 lx (50 III	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.5.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  stween auto and manual ng range:1.5 m (4.92 ft)  cor (0.033 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation (Frame Mix 6 dB))  E, F1.8, 48 dB,1/30 without accumulation (Frame Mix 6 dB))  E, F1.8, 48 dB,1/30 without accumulation (Frame Mix 6 dB))  E, F1.8, 48 dB,1/30 without accumulation (Frame Mix 6 dB))		Standard proto- connecting cab [SD card rec SD card recordi Video compress Audio compress	col ole cording] ing sion format sion format	Mini DIN 8-  MPEG-4 AV  MPEG-4 AV  AAC-LC (48 3840x2160/ 1920x1080/ 1280x720/5 1280x720/2 3840x2160/ 1920x1080/ 1280x720/5 1280x720/5	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I-kHZ, 16 bit, 2 ch, 128 kbps)  729.97p (Up to 72 Mbps), 1920x1080/59.94p (U  729.97p (Average 15 Mbps/Average 10 Mbps)  79.97p (Average 15 Mbps)  79.97p (Average 15 Mbps), 1920x1080/50p(Up to 28  1/25p(Up to 72 Mbps), 1920x1080/50p(Up to 28  1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28  1/25p(Average 18 Mbps), 1920x1080/50p(Up to 28	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
SUNCTIONS	Lens Focus Focus distance Color separation optical system  Minimum illumination 50 Hz  Horizontal resolution Gain selection*2	Motorized 2t   f = 4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip cole 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.45 lx (50 III 0.45 lx (50 III	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9/3.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  stween auto and manual ng range:1.5 m (4.92 ft)  cor (0.03.3 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 without accumulation  FF1.8, 48 dB,1/30 without accumulation   RE, F1.8, 48 dB,1/35 with accumulation   SE, F1.8, 4		Standard proto connecting cab [SD card rec SD card record] Video compress Audio compress Recording format /Bit rate	col ide cording] ing sion format sion format 59.94 Hz	MINI DIN 8- MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160/ 1920x1080, 1280x720/5 1280x720/5 1920x1080, 1280x720/5 1280x720/5	pin cable, male  (Cfile standard compliant (.MP4)  (C/H.264 High Profile  kHz, 16 bit, 2 ch, 128 kbps)  (29.97p (Up to 72 Mbps), 1920x1080/59.94p (U 29.97p (Lyerage 15 Mbps/Average 10 Mbps/Say4p (Wcapage 15 Mbps/Average 15 Mps/Average 15 Mbps/Average 15 Mbps/Average 15 Mbps/Average 15 Mbps/Average 10 Mbps/Average 15 Mbps/Average 14 Mbps/Average 15 Mbps/Average 14 Mbps/Average 15 Mbps/Average 14	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
FUNCTIONS	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 20 ff=4.08 mm equivalent: 2 Switching be Entire zoom! Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV Auto, 0 dB tx Auto, 0 ff, 6 C	Ox zoom, F1.8 to F3.6  [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]		Standard proto connecting cab [SD card rec SD card record) Video compress Audio compress Recording format /Bit rate	col ole cording] ing sion format sion format	MPEG-4 AV MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160) 1280x720/2 3840x2160) 1280x720/2 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3	pin cable, male  //C file standard compliant (_MP4)  //C/H.264 High Profile  kHz, 16 bit, 2 ch, 128 kbps)  729.97p (Up to 72 Mbps), 1920x1080/59.94p (U  //29.97p (Average 15 Mbps/Average 10 Mbps,  59.94p (Average 15 Mbps/Average 4 Mbps/Average  //25p(Up to 72 Mbps), 1920x1080/59p(Up to 28  //25p(Average 15 Mbps/Average 10 Mbps/Average  //25p(Average 15 Mbps/Average 10 Mbps/Average  //25p(Average 18 Mbps/Average 4 Mbps/Average  //25p(Average 18 Mbps/Average	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
FUNCTIONS AND PERFORMANCE	Lens Focus Focus distance Color separation optical system  Minimum illumination 50 Hz  Horizontal resolution Gain selection*2	Motorized 20 ff=4.08 mm equivalent: 2 Switching be Entire zoom! Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV Auto, 0 dB tx Auto, 0 ff, 6 C	Ox zoom, F1.8 to F3.6 [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) to 92.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft) 0 cm (0.33 ft) or filter system [5.7.8, 48 dB,1/30 with accumulation] F1.8, F1.8, 48 dB,1/30 with accumulation[F1.8, F1.8, 48 dB,1/30 with accumulation] F1.8, F1.8, 48 dB,1/30 with accumulation[F1.8, F1.8, 48 dB,1/30 with accumulation] F1.8, F		Standard proto connecting cab [SD card rec 5D card rec 5D card record) Video compress Audio compress Audio compress Recording format [Bit rate [Network]	col ide cording] ing sion format sion format 59.94 Hz	MPEG-4 AV MPEG-4 AV MPEG-4 AV AAC-LC (48 3840x2160) 1920×1080, 1280×720)[5 1280×720] 1280×720] 1280×720] 1280×720] 1920×1080, 1280×720] 1920×1080, 1920×1080, 1920×1080, 1920×1080, 1920×1080, 1920×1080, 1920×1080, 1920×1080,	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  1842, 16 bit, 2 ch, 128 kbps)  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U  129.97p (Average 15 Mbps/Average 10 Mbps)  59.94p (Average 15 Mbps/Average 10 Mbps/Average)  129.97p (Average 18 Mbps/Average 4 Mbps/Average)  125p(Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), Average 10 Mbps/Average 150p(Average 15 Mbps/Average 15 Mbps/Av	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 1t On-chip colc 0.7 lx (50 lRi 0.35 lx (50 lli 0.35 lx (50 lli 0.35 lx (50 lli 0.45	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9/3.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  ttween auto and manual ng range:1.5 m (4.92 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 without accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 without accumulation[Frame Mix 6 dB])  Ilines Typ (Center area)  1/1 mes Typ (Center area)  1/2 dB (3 dB step)  1/3 dB (3 dB step)  1/3 dB (3 dB step)  1/4 (1/16, 1/64)  1/6 to 1/2000 (Auto Slow Shutter: Off][59.94 Hz]		Standard proto connecting cab [SD card rec SD card record) Video compress Audio compress Recording format /Bit rate	col le cording] mg sion format sion format 59.94 Hz	MPEG-4 AV MPEG-4 AV MPEG-4 AV MPEG-4 AV AC-1LC (48 3840×2160) 1920×1080, 1280×720)[2 1820×720] 1920×1080, 1280×720] 1920×1080, 59.94 Hz (3 50 Hz (25fp	pin cable, male  (Cfile standard compliant (.MP4)  (29.976 (Up to 72 Mbps), 1920x1080/59.94p (U  (29.976 (Average 15 Mbps), 1920x1080/59.94p (U  (29.976 (Average 15 Mbps), 1920x1080/50p(Up to 28  (25p(Up to 72 Mbps), 1920x1080/50p(Up to 28  (25p(Up to 72 Mbps), 1920x1080/50p(Up to 28  (25p(Average 15 Mbps), 25p(Average 10 Mbps/Average 15  (1280x720, 640x360, 320x180, 0fps), 15ps/5fps)  (1290x1080, 1280x720, 640x360, 320x180, 1920x180), 1290x1080, 1280x720, 640x360, 320x180, 1920x1080, 1280x720, 640x360, 320x180, 1280x720, 640x360, 320x	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 2t f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV Auto, 0 dB tc Auto, 0 dF, 6-Auto*4, Throi	Dx zoom, F1.8 to F3.6  [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  g).5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  tween auto and manual  ng ranger1.5 m (4.92 ft)  or filter system  E, F1.8, 48 dB,1/30 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/50 without accumulation  RE, F1.8, 48 dB,1/		Standard proto connecting cab [SD card rec 5D card rec 5D card record) Video compress Audio compress Audio compress Recording format [Bit rate [Network]	col ide cording] ing sion format sion format 59.94 Hz	MPEG-4 AV MPEG-4 AV MPEG-4 AV MPEG-4 PAV MPEG-4 PAV MPEG-4 PAV MPEG-4 PAV 1280x720/5 1280x720/5 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/3 128	pin cable, male  I'C file standard compliant (.MP4)  I'C/H.264 High Profile  IkHZ, 16 bit, 2 ch, 128 kbps)  729.97p (Up to 72 Mbps), 1920x1080/59.94p (U  729.97p (Average 15 Mbps/Average 10 Mbps)  79.97p (Average 15 Mbps/Average 10 Mbps/Average 10 Mbps/Bys/Bys/Bys/Bys/Bys/Bys/Bys/Bys/Bys/By	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 1t On-chip colc 0.7 lx (50 lRi 0.35 lx (50 lli 0.35 lx (50 lli 0.35 lx (50 lli 0.45	Dx zoom, F1.8 to F3.6 [5/32 inches] to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) to 92.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)] tween auto and manual ng range:1.5 m (4.92 ft) 0 cm (0.33 ft) or filter system [5.7 kg, 4.92 ft] 0 cm (0.33 ft) or filter system [5.7 kg, 4.8 dB,1/30 with accumulation] Frame Mix 6 dB]] E, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB]] E, F1.8, 48 dB,1/25 with accumulation[Frame Mix 6 dB]] lines Typ (Center area) [1 kg, 12 dB, 18 dB, 24 dB, 16 dB, 12 dB, 18 dB, 24 dB, 16 dB, 12 dB, 18 dB, 24 dB, 16		Standard proto connecting cab [SD card rec 5D card rec 5D card record) Video compress Audio compress Audio compress Recording format [Bit rate [Network]	col le cording] mg sion format sion format 59.94 Hz	Mini DIN 8- MPEG-4 AW MPEG-4 AV AAC-LC 48 3840x2160/ 1920x1080, 1280x720/2 3840x2160/ 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 59.94 Hz (6 59.94 H	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/C/H.264 High Profile  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U 129.97p (Up to 72 Mbps), 1920x1080/59.94p (U 129.97p (Average 15 Mbps), 1920x1080/59.94p (U 129.97p (Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Up to 72 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 8 Mbps/Average 4 Mbps/Average 2 1/25p(Average 8 Mbps/Average 4 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Av	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 2t f=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV Auto, 0 dB tc Auto, 0 dF, 6-Auto*4, Throi	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.5.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  streen auto and manual ng range:1.5 m (4.92 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 without accumulation[Frame Mix 6 dB])  Ilines Typ (Center area)  1/8 10 dB (3 dB step)  1/8 12 dB, 18 dB, 24 dB  1/60 to 1/2000 (Auto Slow Shutter: Off][59.94 Hz]  1/30 to 1/2000 (Auto Slow Shutter: On][59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: On][59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: Off][50 Hz]  1/52 to 1/2000 (Auto Slow Shutter: Off][50 Hz]		Standard proto connecting cab [SD card rec 50 card rec 50 card recordi Video compress Audio compress Audio compress [Network]  Transfer modes	col le coording] ing sion format sion format 59.94 Hz  JPEG H.264	Mini DIN 8- MPEG-4 AW MPEG-4 AW MPEG-4 AW AAC-LC (48 3840x2160/ 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 50 Hz (50fp 59.94 Hz (6 50 Hz (50fp	pin cable, male  I/C file standard compliant (_MP4)  I/C gas file standard (_MP4	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 1t On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.7 lx (50 IRI 0.35 lx (50 II 0.45 lx (50 IRI 0.45	Dx zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  g).5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  tween auto and manual  ng ranger1.5 m (4.92 ft)  oc m (0.33 ft)  or filter system  5, F1.8, 48 dB,1/30 without accumulation)  RE, F1.8, 48 dB,1/30 without accumulation Frame Mix 6 dB])  5, F1.8, 48 dB,1/50 without accumulation Frame Mix 6 dB])  ilines Typ (Center area)  1 lines Typ (Center area)  48 dB (3 dB step)  48, 12 dB, 18 dB, 24 dB  19, 1/4, 1/16, 1/64  1/60 to 1/2000 (Auto Slow Shutter: Onf)[59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: Off)[50 Hz]  1/55 to 1/2000 (Auto Slow Shutter: Onf)[50 Hz]  1/50 to 1/2000 (Auto Slow Shutter: Onf)[50 Hz]		Standard proto connecting cab ISD card rec SD card recordi Video compress: Audio compress: Recording format /Bit rate  [Network]  Transfer modes  Supported	col le cording] mg sion format sion format 59.94 Hz	Mini DIN 8- MPEG-4 AW MPEG-4 AW AAC-LC 483 3840x2160/ 1280x720/2 1	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/C/H.264 High Profile  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U 129.97p (Up to 72 Mbps), 1920x1080/59.94p (U 129.97p (Average 15 Mbps), 1920x1080/59.94p (U 129.97p (Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Up to 72 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 8 Mbps/Average 4 Mbps/Average 2 1/25p(Average 8 Mbps/Average 4 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Average 8 Mbps/Average 8 Mbps/Average 1 1/25p(Av	p to 28 Mbps), (Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps),	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 1C On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.7 lx (50 IRI 0.35 lx (50 II 0.45 lx (50 IRI 0.45	Ox zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  titween auto and manual ng range:1.5 m (4.92 ft) core (10.33 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 without accumulation[Frame Mix 6 dB])  RE, F1.8, 48 dB,1/32 with accumulation[Frame Mix 6 dB])  Innes Typ (Center area)  10.48 dB (3 dB step)  10.49 dB (3 dB step)  10.49 dB (3 dB step)  10.40 dB (3 dB step)  10.40 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz]  1/30 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: On)[50 Hz]  1/60 to 1/2000 (Bus Slow Shutter: On)[50 Hz]  1/60 to 1/2000 (59.94 Hz)  1/50 to 1/2000 (59.94 Hz)		Standard proto connecting cab [SD card rec 50 card rec 50 card recordi Video compress Audio compress Audio compress [Network]  Transfer modes	col ele le cording] ing sion format sion format 59.94 Hz  JPEG H.264	Mini DIN 8- MPEG-4 AW MPEG-4 AW AAC-LC (48 3840x2160/ 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 59.94 Hz (3 50 Hz (25fp 59.94 Hz (50fp TCP/IP, UPD DHCP, DNS, RTSPoverH1	pin cable, male  I/C file standard compliant (_MP4)  I/C/H.264 High Profile  IkHz, 16 bit, 2 ch, 128 kbps)  29.97p (Up to 72 Mbps), 1920x1080/59.94p (U  29.97p (Average 15 Mbps), Average 10 Mbps,  59.94p (Average 15 Mbps), Average 4 Mbps/Average  25/6µ/40 Average 15 Mbps, 1920x1080/50p(Up to 28  I/Z5p(Average 15 Mbps), 1920x1080/50p(Up to 28  I/Z5p(Average 15 Mbps), Average 10 Mbps/Average  15 Mbps/Average 10 Mbps/Average 4 Mbps/Average  15 Mbps/Average 3 Mbps/Average 4 Mbps/Average  18 Mbps/Average 4 Mbps/Average 4 Mbps/Average  19 Mps/Average 15 Mbps,  18 Mps/Average 4 Mbps/Average  19 Mps/Average 5 Mbps/Average 4 Mbps/Average  19 Mps/Sp(15fps) 19 Mps/Average 4 Mbps/Average  19 Mps/Sp(15fps)	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV Hb: 1000 TV Auto, 0 dB tx Auto, 0 ff, 6. Auto <sup>44</sup> , Throi	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (9/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (9/35 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  ttween auto and manual  ng range:1.5 m (4.92 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  lines Typ (Center area)  1/60 tB, F1.8, 48 dB,1/25 with accumulation[Frame Mix 6 dB])  BB, T2 dB, T8 dB, T2 dB, T2 dB, T2 dB, T3 dB, T2 dB, T3 dB, T3 dB, T4 dB		Standard proto connecting cab ISD card rec SD card recordi Video compress: Audio compress: Recording format /Bit rate  [Network]  Transfer modes  Supported	col le coording] ing sion format sion format 59.94 Hz  JPEG H.264	Mini DIN 8- MPEG-4 AW MPEG-4 AW AAC-LC (48 3840x2160/ 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 59.94 Hz (3 50 Hz (25fp 59.94 Hz (50fp TCP/IP, UPD DHCP, DNS, RTSPoverH1	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/C/H.264 High Profile  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U 1/29.97p (Up to 72 Mbps), 1920x1080/59.94p (U 1/29.97p (Average 15 Mbps), 1920x1080/59.94p (U 1/29.97p (Average 15 Mbps), 1920x1080/50p(Up to 28 1/25p(Average 15 Mbps), 1920x1080, 192	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter	Motorized 20 ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV HD: 1000 TV Auto, 0 dB tc Auto, 0 ff, 6 Auto*4, Throi During Full Auto During Auto During Auto	Dx zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  tween auto and manual ng range:1.5 m (4.92 ft)  Oc m (0.33 ft)  Or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/50 without accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/50 without accumulation[Frame Mix 6 dB])  Innes Typ (Center area)  1 (8 dB (3 dB step)  1 dB, 12 dB, 18 dB, 24 dB  1 dB, 12 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 18 dB, 24 dB  2 dB, 18 dB, 12 dB, 28 dB  2 dB, 18 dB, 24 dB  2 dB, 18 dB, 18 dB, 24 dB  2 dB, 18 dB, 12 dB, 28 dB  2 dB, 18 dB, 18 dB, 24 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB		Standard proto connecting cab ISD card rec SD card recordi Video compress: Audio compress: Recording format /Bit rate  [Network]  Transfer modes  Supported	col elected le coording] ing sion format sion format 59.94 Hz  50 Hz  JPEG H.264  IPv4  IPv6	Mini DIN 8- MPEG-4 AW MPEG-4 AW AAC-LC (48 3840x2160/ 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 1280x720/5 59.94 Hz (3 50 Hz (25fp 59.94 Hz (50fp TCP/IP, UPD DHCP, DNS, RTSPoverH1	pin cable, male  //C file standard compliant (.MP4)  //C 99.7p (Average 15 Mbps), 1920x1080/59.94p (U  //S 99.7p (Average 15 Mbps), 1920x1080/59p(Up to 28  //S p(I bv 72 Mbps), 1920x1080/59p(Up to 28	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV Hb: 1000 TV Auto, 0 dB tx Auto, 0 ff, 6. Auto <sup>44</sup> , Throi	Ox zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.5 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  titween auto and manual ng range:1.5 m (4.92 ft)  cor (10.33 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 without accumulation[Frame Mix 6 dB])  RE, F1.8, 48 dB,1/32 with accumulation[Frame Mix 6 dB])  Innes Typ (Center area)  10.48 dB (3 dB step)  10.48 dB (3 dB step)  10.49 dB, 18 dB, 24 dB  10.40 lf (16, 1/64  1/60 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz] 1/30 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz] 1/25 to 1/2000 (Auto Slow Shutter: Off)[59.14 Hz] 1/25 to 1/2000 (Auto Slow Shutter: Off)[50 Hz] 1/60 to 1/2000 [59.94 Hz] 1/100 to 1/2000 [59.94 Hz] 1/100 to 1/2000 [59.94 Hz] 1/100 to 1/2000 [59.94 Hz] 1/1000 to 1/2000 [59.94 Hz] 1/1000 to 1/250 to 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59.94 Hz] 1/100, 1/250, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59.94 Hz] 1/101, 1/250, 1/500, 1/1000, 1/2000,		Standard proto connecting cab  ISD card rec  SD card rec  SD card recordi  Video compress  Audio compress  Recording format /Bit rate  [Network]  Transfer modes  Supported protocol  i-OS, Android s	col le cording] ing sion format sion format 59.94 Hz  JPEG H.264  IPv4  IPv6  upport	Mini DIN 8- MPEG-4 AW MPEG-4 AW MPEG-4 AV AAC-LC 483 3840x2160/ 1920x1080, 1280x720/2 1380x720/2 1380x720/2 1920x1080, 1280x720/2 1920x1080, 59.94 Hz (36) 59.94 Hz (50fp TCP/IP, UDP DHCP, DNS, RTSPoverH1 TCP/IP, UDP JPEG image	pin cable, male  //C file standard compliant (.MP4)  //C 99.7p (Average 15 Mbps), 1920x1080/59.94p (U  //S 99.7p (Average 15 Mbps), 1920x1080/59p(Up to 28  //S p(I bv 72 Mbps), 1920x1080/59p(Up to 28	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter  Electronic shutter speed	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip cold 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 0.45 l	Dx zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  tween auto and manual ng range:1.5 m (4.92 ft)  Oc m (0.33 ft)  Or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/50 without accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/50 without accumulation[Frame Mix 6 dB])  Innes Typ (Center area)  1 (8 dB (3 dB step)  1 dB, 12 dB, 18 dB, 24 dB  1 dB, 12 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 17 dB, 18 dB, 24 dB  1 dB, 18 dB, 24 dB  2 dB, 18 dB, 12 dB, 28 dB  2 dB, 18 dB, 24 dB  2 dB, 18 dB, 18 dB, 24 dB  2 dB, 18 dB, 12 dB, 28 dB  2 dB, 18 dB, 18 dB, 24 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB  2 dB, 18 dB, 18 dB, 18 dB		Standard proto connecting cab  ISD card rec  SD card rec  SD card recordi  Video compress  Audio compress  Recording format /Bit rate  [Network]  Transfer modes  Supported protocol  i-OS, Android s	col le cording] ing sion format sion format 59.94 Hz  59.94 Hz  JPEG  H.264  IPv4  IPv6  upport for installatin	Mini DIN 8- MPEG-4 AW MPEG-4 AV AAC-LC 48 3840x2160/ 1920x1080, 1280x720/2 3840x2160/ 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 59.94 Hz (3 59.94 Pz (6) 59.94 Pz (6) 59.94 Pz (7) FCP/P, UDP DHCP, DNS, RTSPowerHI TCP/P, UDP JPEG image on surface (H	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/C/H.264 High Profile  129.979 (Up to 72 Mbps), 1920x1080/59.94p (U  129.979 (Up to 72 Mbps), 1920x1080/59.94p (U  129.979 (Average 15 Mbps), 1920x1080/59.94p (U  129.979 (Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), 1920x1080, 192	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter	Motorized 20 ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 4K: 1300 TV HD: 1000 TV HD: 1000 TV HD: 1000 TV HD: 1000 TV Grant of Switch Auto, Off, 6 Auto*4, Throi During Full Auto  During Auto  During Auto  During Auto  59.94 Hz: 5	Ox zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  ttween auto and manual  ng range:1.5 m (4.92 ft)  Or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  E, F1.8, 48 dB,1/30 with accumulation[Frame Mix 6 dB])  Iines Typ (Center area)  1/6 dB (3 dB step)  1/60 to 1/2000 (Auto Slow Shutter: Off][59.94 Hz]  1/30 to 1/2000 (Auto Slow Shutter: On][59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: On)[59.94 Hz]  1/50 to 1/2000 (Auto Slow Shutter: On)[59.12  1/60 to 1/2000 (Say 4 Hz]  1/60 to 1/2000 [59.94 Hz]  1/100, 1/250, 1/500, 1/1000, 1/2000,  1/4000, 1/10000 [59.94 Hz]  1/100, 1/250, 1/500, 1/1000, 1/2000,  1/4000, 1/10000 [59.94 Hz]		Standard proto connecting cab [SD card rec 5D card rec 5D card record) Video compress Audio compress Audio compress Ibit rate  [Network]  Transfer modes  Supported protocol i-OS, Android s Mount bracket	col ele le	Mini DIN 8- MPEG-4 AW MPEG-4 AW AAC-LC (48 3840x2160/ 1280x720/5 1720x1080, 59.94 Hz (35 59.94 Hz (50 5	pin cable, male  ipin cable  i	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter  Electronic shutter speed	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 10 On-chip cold 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 0.45 l	Dx zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  ttween auto and manual  ng range:1.5 m (4.92 ft)  Oze (10.33 ft)  oze (10.34 ft	ACCESSORIES	Standard proto connecting cab ISD card rec ISD card rec ISD card recordi Video compress Audio compress Audio compress ISD card recording format IBit rate  [Network]  Transfer modes  Supported protocol i-OS, Android s Mount bracket Drop-preventio Bracket mounti Main unit mour Main unit mour mount mour mount moun	col le cording] ing sion format sion format 59,94 Hz  JPEG  H.264  IPv4  IPv6  upport for installatin in wire (alrea in serve we (bitting screw (bitting scr	Mini DIN 8- MPEG-4 AW MPEG-4 AV AAC-LC 48 3840x2160/ 1920x1080, 1920x1080, 1280x720/2 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 59.94 Hz (3 59.94 Hz (6 59.94 Pz (56) 100 DHCP, DNS, RTSPoverHT, UPP TCP/P, UPP JPEG image on surface (H dy attached t ind-head) M4 with flat wash	pin cable, male  ipin cable  i	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  59.94 Hz  50 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter  Electronic shutter speed	Motorized 20 ff=4.08 mm equivalent: 2 Switching be Entire zoomii Wide end: 11 On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35	Ox zoom, F1.8 to F3.6 (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches) (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches))  titween auto and manual ng range:1.5 m (4.92 ft) cor (10.33 ft)  or filter system  E, F1.8, 48 dB,1/60 without accumulation)  RE, F1.8, 48 dB,1/30 with accumulation (Frame Mix 6 dB))  E, F1.8, 48 dB,1/30 without accumulation (Frame Mix 6 dB))  Ilines Typ (Center area)  18, 12 dB, 18 dB, 15/2 with accumulation (Frame Mix 6 dB))  18, 12 dB, 18 dB, 24 dB  19, 1/4, 1/16, 1/64  1//60 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz] 1/30 to 1/2000 (Auto Slow Shutter: Off)[59.94 Hz] 1/50 to 1/2000 (Auto Slow Shutter: On)[59.94 Hz] 1/50 to 1/2000 (Auto Slow Shutter: On)[50 Hz] 1/50 to 1/2000 (Auto Slow Shutter: On)[50 Hz] 1/50 to 1/2000 (Sp. 94 Hz] 1/100 to 1/2000 (50 Hz] 1/100, 1/25, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59.94 Hz] 1/100, 1/25, 1/500, 1/1000, 1/2000, 1/4000, 1/10000 [59 Hz] 9.94 Hz to 660.09 Hz (255 step) 0 Hz to 570.12 Hz (255 step)	ACCESSORIES	Standard proto connecting cab  [SD card rec  SD card rec  SD card record  Video compress  Audio compress  Recording format  //Bit rate   [Network]  Transfer  modes  Supported  protocol  i-OS, Android s  Mount bracket  Drop-preventio  Bracket mount  Main unit mount  Main unit mount  Power cable (1.	col le cording] ing sion format sion format 59,94 Hz  JPEG  H.264  IPv4  IPv6  upport for installatin in wire (alrea in serve we (bitting screw (bitting scr	Mini DIN 8- MPEG-4 AW MPEG-4 AV AAC-LC 48 3840x2160/ 1920x1080, 1920x1080, 1280x720/2 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 59.94 Hz (3 59.94 Hz (6 59.94 Pz (56) 100 DHCP, DNS, RTSPoverHT, UPP TCP/P, UPP JPEG image on surface (H dy attached t ind-head) M4 with flat wash	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/K.H.2, 16 bit, 2 ch, 128 kbps)  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U  129.97p (Average 15 Mbps/Average 10 Mbps/S  129.97p (Average 15 Mbps), 1920x1080/50p(Up to 28  125p(IAverage 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Average 15  15p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Average 15  15p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Av	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	
AND	Imaging sensors  Lens  Focus  Focus distance  Color separation optical system  Minimum illumination  50 Hz  Horizontal resolution  Gain selection*2  Frame mix*3  ND filter  Electronic shutter speed	Motorized 2t ff=4.08 mm equivalent: 2 Switching be Entire zoomi Wide end: 1t On-chip colc 0.7 lx (50 IRI 0.35 lx (50 II 0.35 lx (50 II 0.35 lx (50 II 0.48: 1300 TV HD: 1000 TV Auto, 0 dB tt Auto, 0 ff, 6: Auto*4, Throi During Full Auto During Auto During Auto South Auto, 0 ff, 6: During Auto Auto, 0 ff, 6: During Full Auto During Auto During Auto Auto, 0 ff, 6: During Auto During Auto During Auto Auto, 0 ff, 6: Auto*4, Throi	Dx zoom, F1.8 to F3.6  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (5/32 inches) to 81.6 mm (3-7/32 inches); 35 mm (1-3/8 inches)  (9.55 mm (1-5/32 inches) to 612.0 mm (24-3/32 inches)]  ttween auto and manual  ng range:1.5 m (4.92 ft)  Oze (10.33 ft)  oze (10.34 ft	ACCESSORIES	Standard proto connecting cab ISD card rec ISD card rec ISD card recordi Video compress Audio compress Audio compress ISD card recording format IBit rate  [Network]  Transfer modes  Supported protocol i-OS, Android s Mount bracket Drop-preventio Bracket mounti Main unit mour Main unit mour mount mour mount moun	col le cording] ing sion format sion format 59,94 Hz  JPEG  H.264  IPv4  IPv6  upport for installatin in wire (alrea in serve we (bitting screw (bitting scr	Mini DIN 8- MPEG-4 AW MPEG-4 AV AAC-LC 48 3840x2160/ 1920x1080, 1920x1080, 1280x720/2 1280x720/2 1280x720/2 1920x1080, 59.94 Hz (3 59.94 Hz (3 59.94 Hz (6 59.94 Pz (56) 100 DHCP, DNS, RTSPoverHT, UPP TCP/P, UPP JPEG image on surface (H dy attached t ind-head) M4 with flat wash	pin cable, male  I/C file standard compliant (.MP4)  I/C/H.264 High Profile  I/K.H.2, 16 bit, 2 ch, 128 kbps)  129.97p (Up to 72 Mbps), 1920x1080/59.94p (U  129.97p (Average 15 Mbps/Average 10 Mbps/S  129.97p (Average 15 Mbps), 1920x1080/50p(Up to 28  125p(IAverage 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps), 1920x1080/50p(Up to 28  125p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Average 15  15p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Average 15  15p(Average 15 Mbps/Average 4 Mbps/Average 10 Mbps/Av	p to 28 Mbps), [Average 6 Mbps), 2 Mbps/Average 1 Mbps) Mbps), erage 6 Mbps), 2 Mbps/Average 1 Mbps) HDPs/Average 1 Mbps)	

\* 1: It may be necessary to upgrade the version of the controller so that the controller will support the unit. \* 2: During Auto, 6 dB to 48 dB (6 dB step) are available for AGC Max Gain setting.

\* 3: During Auto, 0 dB, 6 dB, 12 dB and 18 dB are available for Auto F.Mix Max Gain setting. \* 4: "Auto" is available when "Scene" setting is "Full Auto".

\* 5: To ensure safety, the unit must be secured using the mount bracket supplied. \* 6: Depending on the pan or tilt position, the camera may be reflected in the image.

\* 7: Use of an STP (shielded twisted pair) cable is recommended. \* 8: The frame rate may be lower than the setting depending on the operating conditions.

\* 9: When the image resolution is "3840x2160", "640x360" or "320x180", 60fps or 50fps cannot be selected for the frame rate. \* 10: To ensure more safety, AW-UE70W/K can be secured by using the direct ceiling mount bracket (WV-Q105A).

#### **Computer Requirements** As of April, 2018

CPU	When using 1080/60p [59.94 Hz] and 1080/50p [50 Hz] Intel® CoreTM i7 3.4 GHz or higher recommended Other than above Intel® CoreTM2 Duo 2.4 GHz or higher recommended					
Memory	For Windows	1 GB or higher (2 GB or higher for Microsoft® Windows® 8.1, Microsoft® Windows® 8, Microsoft® Windows® 7 64-bit edition)				
Wellory	For Mac	2 GB or more				
Network function	10BASE-T or 100BASE-TX p	SE-TX port x 1				
Image display function	Resolution: 1024 x 768 pixe	els or more Color generation: True Color 24-bit or more				
Supported operating system and web browser	Windows	Microsoft® Windows® 8.1 Pro 64-bit/32-bit* <sup>11</sup> Windows® Internet Explorer® 11.0 Microsoft® Windows® 8 Pro 64-bit/32-bit* <sup>11</sup> Windows® Internet Explorer® 10.0* <sup>11</sup> Microsoft® Windows® 7 Professional SP1 64-bit/32-bit* <sup>12</sup> Windows® Internet Explorer® 8.0 / 9.0 / 10.0 / 11.0* <sup>13</sup>				
	Mac	OS X 10.8 Safari 6.2 / OS X 10.9 Safari 7.1 / OS X 10.10 Safari 8.0				
	iPhone / iPad / iPod touch	iOS 8.3 Standard browser				
	Android	Android OS 4.4 Standard browser				
Other	CD-ROM drive (for using the Operating Instructions and various software) Adobe® Reader® (for viewing the Operating Instructions on the CD-ROM)					

\*11: Use the desktop version of Internet Explorer. (Internet Explorer for Windows UI is not supported.) \*12: Windows® XP compatibility mode is not supported. \*13: The 64-bit version of Internet Explorer® is not supported.

For the latest information on supported OS/browser, please refer to the "service and support" on the Panasonic website (https://pro-av.panasonic/en/).

•Microsoft®, Windows®, Windows® 7, Windows® 8, Windows® 8.1 and Internet Explorer® are either registered trademarks or trademarks of Microsoft Corporation in the United States and other countries.

•Apple, Mac, OS X, iPhone, iPod Touch, iPad, and Safari are registered trademarks of Apple Inc., in the United States and other countries.

•Android™ is a trademark of Google Inc.

#### **Optional Software**

Auto Tracking Software Key

#### AW-SF100/AW-SF200

2 Additional Licenses AW-SF202 3 Additional Licenses AW-SF203

A 30-day Free Trial is Available

- Motion detection and face detection technologies using video streaming from camera achieves smooth auto tracking regardless of where the person is facing.
- AW-SF100 allows a single PTZ camera to be controlled on either a stand-alone or web application version.
- AW-SF200 enables simultaneous auto tracking and centralized control of multiple cameras.\*1
- \*1: Up to four cameras per server can be controlled simultaneously.

#### **PTZ Control Center**

Free Software

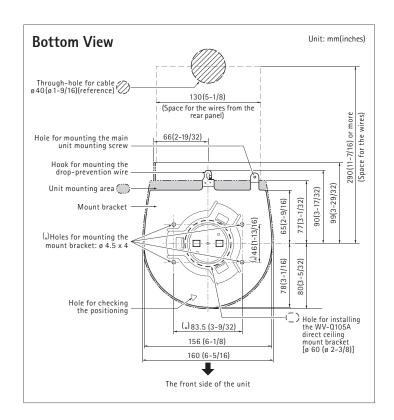
- Intuitive GUI with the capability to control multiple cameras.
- Image quality adjustment and pan-tilt-zoom control on a GUI.
- Easy to recall presets by clicking preset buttons with thumbnails.



#### PTZ Virtual USB Driver

Free Software

- High quality video perfect for web conferencing, utilizing a PTZ camera on the network as a USB camera.
- Automatic detection of connected cameras, and network settings supported.
- \* For further information on the optional software, please see "Software Download" on the Panasonic website <a href="https://pro-av.panasonic.net/">https://pro-av.panasonic.net/</a>.



#### Rear View



For more information, please visit Panasonic web site



U.S.A.

\*Specifications are subject to change without notice.

#### **Panasonic Corporation Connected Solutions Company**

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Factories of AVC Networks Company have received ISO14001:2004-the Environmental Management System certification. (Except for 3rd party's peripherals.)