SONY



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XAVC workflow support partners

	XAVC Work	flow Sup	port	: NLE	Partn	ers a	nd Soi	ny Sc	ftwa	re Pro	oduct	ts		
			XAVC INTRA							Long GOP 2:2) 10 bit		XAVC Long GOP (4:2:0) 8 bit		
	SOFTWARE PRODUCTS	SUPPLIER		Decode			Encode		D	ec	E	nc	Dec	Enc
			4K(300)	4K(480)	HD	4K(300)	4K(480)	HD	4K	HD	4K	HD	4K	4K
Adobe	Premiere Pro CC 2015 (native)	Adobe	✓	✓	✓	✓	✓	✓	✓	✓		✓	✓	✓
G grass valley	EDIUS PRO 8.22	GV	/	✓	/	/		✓	✓	~		✓	✓	✓
	Media Composer 8.6.4 XAVC Plug-in (PDZK-MA2 v3.41)	Sony	~	~	~	~	~	~	~	~		~	~	~
	FCP-X (native) v 10.2.3 w/ Pro Video Formats v2.0.4	Apple	✓		~					✓			~	
FCP-X	w/ Calibrated {Q} (MXF Import Plug-in)	Calibrated Software	~	~	~				~	~			~	
calibrated	AVC-Intra Create / AVC-LG Create (Encode Plug-ins for Adobe/ Avid/Apple)	Calibrated Software				~	~	~			~	~		~
•	Vegas Pro 14	MAGIX	~	~	~	✓		✓	✓	~		✓	✓	~
COMPLMIT SPICHOLD	Content Browser v2.4.1	Sony	✓		✓					✓			✓	
RAW	RAW Viewer v2.3	Sony	✓	~	✓	✓	✓	✓						
9 9	Catalyst Browse v2016.2 Catalyst Prepare v2016.2 Catalyst Edit v2016.2	Sony	~	~	~	~	~	~		~		~	~	~
xpri.	XPRI NS (Standalone)	Sony			✓ V5.4.2					✓ V5.4.2				

	XAVC S Workflow Supp	ort by Alliand	e Partn <u>ers</u>	(Professio	nal)	
				XAVC S (LON	IG GOP/MP4)	
	SOFTWARE PRODUCTS	SUPPLIER	Dec	ode	Enc	ode
			4K	HD	4K	HD
	Premiere Pro CC (native)		✓	✓		
Adobe	Premiere Pro CC (with SDNA Video Edit Components)	Adobe	~	~	✓ *	✓ *
grass valley	EDIUS PRO 8.22	Grass Valley	✓	~	✓ *	*
	Media Composer 8.6 (native)					
	Media Composer 8.6 (with Drastic Technology MediaReactor Workstation for Avid)	Avid	~	~		
- 32	FCPX 10.2.3 (native)		✓	✓		
FCP-X	FCPX 10.2.3 (with Apple Compressor and SDNA Video Edit Components)	Apple	~	~	✓ *	✓ *
Autodesk	Flame Premium 2017	Autodesk	✓	✓		
telestream	Episode 7.1 (Transcode)	Telestream				
9 7	Vegas Pro 14	MAGIX	~	~	~	~
6	Catalyst Browse /Prepare / Edit v2016.2	SCS	~	~	~	~

^{*} The exported XAVC S files can be played back on the camera using the Windows version of PlayMemories Home.

Five reasons to like Sony's pro



1 XAVC is designed to scale from 25 Mbps to 960 Mbps

XAVC is designed to scale from 25 Mbps to 960 Mbps. This covers just about every likely frame rate (except ultra slow motion) and includes HD as well as 4K.

2. It is designed for acquisition as well as post production

By going back to the basic building blocks of the format, Sony has been able to make a codec that is equally happy in a camera and in post production and which brings tangible benefits to both. This is much better than with previous generations of H.264-based codecs which were arguably not optimal for use at the front end of production.

Better quality than traditional production codecs in less space

ProRes and DNxHD are examples of edit-friendly codecs that are easy to work with because they're relatively simple, and use a low compression ratio. They give great quality at the expense of taking up a bit more room. The more sophisticated algorithms used in XAVC improve the quality for a given bitrate.

ofessional video format - XAVC



4 Dynamically optimises the quality frame by frame

An XAVC encoder optimises quality frame by frame, and while it does this, it records metadata to help decoders understand the optimisations used in the encoding process. So, end-to-end, XAVC maximises quality, but it does so dynamically, so that it doesn't waste space.

5. It's available in professional and consumer formats

XAVC is the professional format, and it's wrapped in an MXF OP1a container - which is standard across broadcast platforms. XAVC-S is the consumer format, and it's wrapped in an MPEG-4 container. It's optimised for consumer use.

Wireless Workflow

Summary of Supported Models

Remote Control File Transfer and Live Streaming

CBM WIFI QOS* PXW-Z150

PXW-FS5 CBM Wifi

PXW-X200 CBM 4G QOS

PXW-X180 📷 4G 📨 QOS CBM I

PXW-X70 CBM WIFI QOS*

CBK-WA100/101 CBM 4G QOS

Remote Control and File transfer

HXR-NX3





Remote Control Only

PXW-FS7 CBM II

PXW-FS7M2 CBM ■

PXW-Z100 CBM ■

HXR-MC2500 CBM Wifi

Wireless LAN/LTE Adapters

4G 4G LTE Dongle

> *For the Modem dongle, recommended model differs country by country depending on carrier

Wifi Dongle

CBK-WA02 USB wireless LAN Adapter 2.4G/5GHz, 802.11a/b/g/n/ac

IFU-WLM3 USB wireless LAN module 2.4GHz, 802.11b/g/n

Application Software



Content Browser Mobile PlayMemories PlayMemories Mobile

QOS Technology

PWS-100RX1 Network RX Station QOS



Sony's QoS Technology



1. Real-Time ARQ **Automatic Repeat Request**

2.ARC

Adaptive Rate Control

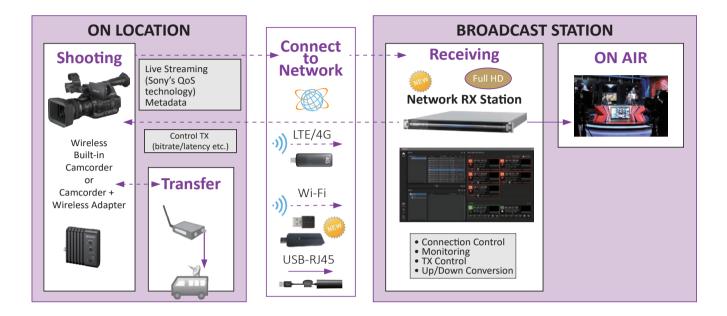
3. FEC

Forward Error Correction

^{*} After future firmware upgrade

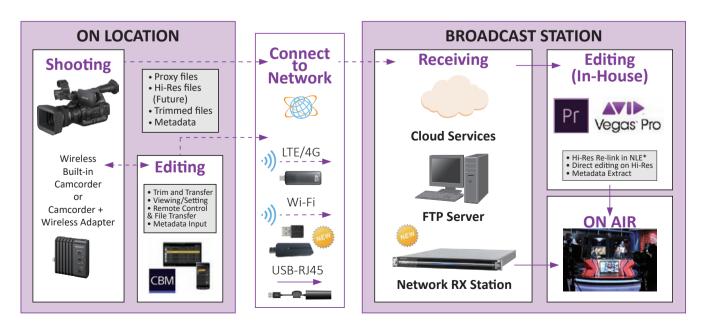
Live Streaming Solution

- Cost efficient solution
- Direct streaming from camcorder
- High quality with Sony's QoS technology
- Choice of transmission Wi-Fi / 4G / USB-RJ45



■ File Transfer Solutions

- No lost picture or lost audio
- High resolution file transfer available
- Trim and transfer Choice of transmission Wi-Fi / 4G / USB-RJ45



HXR-NX5R

Three 1/2.8-type Full-HD Exmor® CMOS sensor NXCAM camcorder







Rich colour imagery with three 1/2.8-type Full-HD ExmorTM CMOS sensors and built-in LED lighting



Networked for high usability with 3G-SDI connection, built-in Wi-Fi and Multi-Interface (MI) Shoe





20x optical zoom plus Clear Image Zoom provides total 40x zoom range offers effectively no visible quality loss and no pixel loss







Format	Resolution	60Hz		Max bitrate
FUIIIat	Nesolution	Fram	Max Diliale	
XAVC S	1920X1080	60p, 30p, 24p	50p, 25p	50Mbps
	1920X1080	60p	50p	28Mbps
	1920X1080	60i/30p/24p	50i,25p	24Mbps
	1280X720	60p	50p	24Mbps
AVCHD	1920X1080	60i/30p/24p	50i,25p	17Mbps
AVCHD	1280X720	60p	50p	17Mbps
	1440X1080	60i	50i	9Mbps
	1280X720	60p	50p	9Mbps
	1440X1080	60i	50i	5Mbps
DV	720X576	60i		25Mbps
DV	720X480		50i	25Mbps

PXW-FS7M2/ FS7M2K

4K Super 35mm Exmor sensor camcorder

Lever Lock Type E-mount gives users the ability to change lenses by rotating the locking collar and don't need to remove the rigs



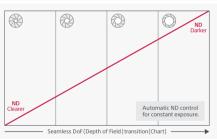


PXW-FS7M2 / PXW-FS7M2K

Electronic Variable ND Filter can be manually controlled from 1/4ND to 1/128ND linearly either by the dial on the operator's side of the camera or via the front wheel on the SmartGrip.

Support for BT.2020. It's possible to utilize in a workflow using BT.2020





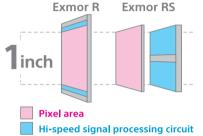
Format	10/22222	Quality	Resolution	60Hz	50Hz	Max bitrate
FOIIIat	Wrapper	Quality	Resolution	Frame R	ate	Max Ditrate
			4096X2160	60p/30p/24p	50p/25p	600/300/240Mbps (60Hz) 500/250Mbps (50Hz)
		4:2:2 10bit XF 4:2:0 8bit	3840X2160	60p	50p	600/500Mbps
XAVC Intra			3840X2160	30p/24p	25p	300/240/250Mbps
	MXF —		1920X1080	60p/30p/24p	50p/25p	222/111/112Mbps (60Hz) 185/112Mbps (50Hz)
			1920X1080	60i	50i	111/112Mbps
			3840X2160	60p	50p	150Mbps
XAVC Long			3840X2160	30p/24p	25p	100Mbps
70.00 20119		4:2:2 10bit	1920X1080	60p/30p/24p 60i	50p/25p 50i	50Mbps
MPEG HD422		4:2:2 8bit	1920X1080	30p/24p 60i	25p 50i	50Mbps
			1280X720	60p/30p/24p	50p/25p	
RAW			Output Format up to 4096X2160	60p/30p/24p	50p/25p	

PXW-Z150

1.0 type Exmor RS™ CMOS sensor 4K compact XDCAM camcorder



The world's first 1.0 type stacked CMOS image sensor, enables beautiful 5x slow motion image capture up to 120fps in Full HD and high resolution 4K recording with full pixel readout without binning.



Compact light body with only 1.9kg & 3 independent manual lens rings to ensure intuitive control of zoom, focus and iris.

3G-SDI output & built in wireless function to ensure extensive connectivity. FTP Transfer, Sony QOS streaming (after firmware update) will be supported giving you better pictures even with limitation of today's real-world networks.

Wireless
Networked for high mobility
Wide choice of connections including 3G-SDI



Format	Wrapper	Quality	Resolution	60Hz	50Hz	Max bitrate	Audio	
FOIIIat	Wrapper	Quality	Resolution	Frame	Rate	Max bitrate	Audio	
		4:2:0 / 8bit	3840x2160	30p/24p	25p	100/60Mbps		
XAVC Long MPEG HD422		4:2:2 / 10bit	1920x1080	60p/30p/24p 60i	50p/25p 50i	50/35Mbps	Linear PCM 2ch, 24bit, 48kHz	
		4:2:2 / 10bit	1920X1080	60i	50i	25Mbps		
	MXF	4:2:0 / 8bit	2:0 / 8bit		50Mbps	AAC-LC 2ch, 16bit, 48kHz		
		4:2:2 / 10bit	1920X1080	30p/24p 60i	25p 50i	50Mbps	Linear PCM 2ch, 24bit, 48kHz	
		4:2:0 / 8bit	1280x720	60p	50p	50Mbps	AAC-LC 2ch, 16bit, 48kHz	
			1920x1080	30p/24p 60i	25p 50i	35Mbps	Linear PCM 2ch, 16bit, 48kHz	
MPEG HD420		4:2:0 / 8bit	1440X1080	60i	50i	35Mbps	TODIC, TOKITZ	
			1280X720	60p	50p	35Mbps	AAC-LC 2ch, 16bit, 48kHz	
			1920x1080	60p	50p	28Mbps	Linear PCM 2ch,	
AVCHD	MTS	MTS 4:2:0 / 8bit	1920x1080	30p/24p 60i	25p 50i	24/17Mbps	16bit, 48kHz Dolby Digital 2ch,	
			1280X720	60p	50p	24/17/9Mbps	16bit, 48kHz	

PXW-FS5/FS5K

Compact Full-HD super slow motion 4K camcorder

4K Super 35 Exmor® sensor offers exceptional image readout speeds required for 4K motion-picture shooting and Super Slow Motion







High Frame Rate (HFR) cache recording at Full-HD 10bit 4:2:2 image quality and a frame rate of up to 240 fps

240_{fps}

Amazingly light 0.8 kg body with Optimized design for Ultimate Handheld Shooting. The radical new design provide unsurpassed on-the-go shooting in the most demanding conditions

Options for FS Raw output or MPEG 2 HD recording (by End 2016)



FS RAW INTERFACE SONY



F	10/	Quality	Danalutian	Resolution 60Hz 50Hz		Max bitrate	Audio	
Format	Wrapper	Quality	Resolution	Frame	Rate	- Max bitrate	Audio	
XAVC Long		4:2:0 / 8bit	3840x2160	30p/24p	25p	100/60Mbps		
	MXF	4:2:2 / 10bit	1920x1080	60p/30p/24p	50p/25p	50/35Mbps	LPCM 2ch	
	IVIAF		1920x1080	60i	50i	50/35/25Mbps	LPCM 2cn	
			1280x720	60p	50p	50Mbps		
MPEG2 ≜			1920x1080	60p/30p/24p	50i/25p	FOME		
			1280x720	60p	50p	50Mbps		
			1920x1080	60p/30p/24p	50i/25p			
			1440x1080	60p/30p/24p	50i/25p	35Mbps		
			1280x720	60p	50p			
			1920x1080	60p	50p	28 (PS)Mbps		
			1920x1080	60i/24p/30p	50i/25p	24 (5)()14		
A) (CLID	MATC	4.2.0 / 06:4	1280x720	60p	50p	24 (FX)Mbps	LPCM 2ch /	
AVCHD	MTS	4:2:0 / 8bit	1920x1080	60i/30p/24p	50i/25p	47 (EV)MI:	AC3 2ch	
			1280x720	60p	50p	17 (FX)Mbps		
			1280x720	60p	50p	9 (HQ)Mbps		
RAW*			3840x2160	60p	50p			

^{*} With optional CBKZ-FS5RIF

[▲] To be released in V3.0 firmware with optional CBKZ-SLMP

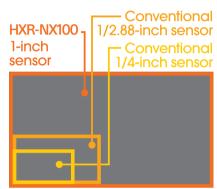
HXR-NX100

1.0 type Exmor R® CMOS sensor camcorder



HXR-NX100

The 1.0 type Exmor R® back-illuminated CMOS sensor delivers fantastic high resolution, low light performance and depth of field for today's diverse shooting requirements



- Three independent manual lens rights ensure intuitive control of zoom, focus and iris
- Maximum 48x zoom with Clear Image Zoom and Digital Extender



Format Wrapper		Quality	Resolution	60Hz	50Hz	Max bitrate	Audio	
ronnat	wrapper	Quality	nesolution	Frame	Rate	Wax Ditiate	Addio	
XAVC S	MP4	4:2:0 / 8bit	1920x1080	60p/30p/24p	50p/25p	50Mbps	LPCM 2ch 24bit, 48kHz	
			1920x1080	60p	50p	28(PS)Mbps		
		4:2:0 / 8bit	1920x1080	60i/30p/24p	50i/25p	24 (EV)Mbps		
			1280x720	60p	50p	24 (FX)Mbps	- LPCM 2ch 16bit, 48kHz	
AVICUD	A. (CUB		1920x1080	60i/30p/24p	50i/25p	17 (FH)Mbps		
AVCHD	MTS		1280x720	60p	50p	17 (FH)IVIDPS		
			1440x1080	60i	50i	9 (HQ)Mbps		
			1280x720	60p	50p	9 (HQ)IVIDPS		
			1440x1080	60i	50i	5 (LP)Mbps		
DV	A) //	4:1:1 / 8bit	720x480	60i		25Mbps		
DV	DV AVI	4:2:0 / 8bit	720x576		50i	25Mbps		

PXW-FS7

4K Super 35 Exmor® CMOS sensor camcorder



The Super 35 Exmor® CMOS sensor is equipped with approximately 11.6 million total pixels and 8.8 million effective pixels





Internal recording in 4K resolution at 60fps as well as a wide range of frame rates (59.94p, 50p, 29.97p, 25p and 23.98p)

Extend flexibility with XDCA-FS7 extension unit for Apple ProRes 422 encoding, Multi camera setting and 4K/2K RAW Recording with HXR-IFR5 and AXS-R5



Format	Wrapper	Quality	Resolution	60Hz	50Hz	Max bitrate	
FOIIIat	Wrapper	Quality	Resolution	Frame R	ate	Max Ditrate	
			4096X2160	60p/30p/24p	50p/25p	600/300/240Mbps (60Hz) 500/250Mbps (50Hz)	
		4:2:210bit	3840X2160	60p	50p	600/500Mbps	
XAVC Intra			3840X2160	30p/24p	25p	300/240/250Mbps	
	MXF		1920X1080	60p/30p/24p	50p/25p	222/111/112Mbps (60Hz) 185/112Mbps (50Hz)	
			1920X1080	60i	50i	111/112Mbps	
		4:2:0 8bit	3840X2160	60p	50p	150Mbps	
XAVC Long			3840X2160	30p/24p	25p	100Mbps	
XX V C Long			4:2:210bit	1920X1080	60p/30p/24p 60i	50p/25p 50i	50Mbps
MPEG HD422		4:2:2 8bit	1920X1080	30p/24p 60i	25p 50i	50Mbps	
			1280X720	60p/30p/24p	50p/25p		
RAW			Output Format up to 4096X2160	60p/30p/24p	50p/25p		

NEX-FS700R/RH

Full-HD super slow motion NXCAM camcorder



The 4K Super 35 Exmor® CMOS sensor and high-speed readout chip is optimized for motion picture shooting, producing exceptional image fidelity with high sensitivity, low noise and minimal aliasing







NEX-FS700R NEX-FS700RH

10x Super Slow Motion recording in Full-HD at 240fps

E-Mount Interchangeable Lens System, compatible with Sony Alpha, Canon EF and a vast array of 35mm lenses via third-party adapters



Format	Resolution	60Hz	50Hz	Max bitrate
FUIIIat	nesolution	Fram	Wax Ditrate	
	1920X1080	60p	50p	28Mbps
	1920X1080	60i/30p/24p	50i/25p	24Mbps
	1280X720	60p	50p	24Mbps
AVCHD	1920X1080	60i/30p/24p	50i/25p	17Mbps
	1280X720	60p	50p	17Mbps
	1440X1080	60i	50i	9Mbps
	1440X1080	60i	50i	5Mbps

NEX-EA50H/EA50K

Large format sensor NXCAM camcorder



The large format Exmor® APS HD CMOS sensor provides high quality, creative moving images and shallow depth of field control

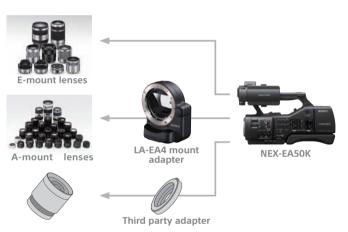




NEX-EA50H

50H NEX-EA50

E-mount interchangeable lens system enables auto focus, auto exposure and stabilization during shooting. The camera can attach virtually any 35mm SLR, DSLR, and Cine lenses via third-party adapters



The unique design and extended shoulder pad enhanced stability for long-duration shooting. Alternatively the camcorder can be used in various handheld styles, allowing you to capture a huge variety of shots

Format	Resolution	60Hz	50Hz	Max bitrate
Format	nesolution	Frame	Wax Ditrate	
	1920X1080	60p	50p	28Mbps
	1920X1080	60i/30p/24p	50i/25p	24Mbps
	1280X720	60p	50p	24Mbps
AVCHD	1920X1080	60i/30p/24p	50i/25p	17Mbps
	1280X720	60p	50p	17Mbps
	1440X1080	60i	50i	9Mbps
	1440X1080	60i	50i	5Mbps

PXV/-7100

1/2.33 inch Exmor R® CMOS sensor 4K compact XDCAM camcorder

The Exmor R® CMOS sensor camcorder is capable of recording 4K (4096 x 2160) at 60 fps or 50fps, while weighing under 3 kg even with a 4K-compatible highperformance G lens™ mounted

The camcorder support XAVC format for recording 4K/HD 60p with 4:2:2 10-bit at 600Mbps. Also, it support XAVC LongGOP (QFHD 4:2:0 8-bit / Full HD 4:2:2 10-bit) as well as AVCHD (Full-HD) format.

HDMI interface enable display of 4K 60p/50p footage and 3G HD-SDI interface supports output through a BNC cable with up to HD 60fps



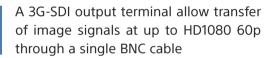


Format	Wrapper	Quality	Resolution	60Hz	50Hz	Max bitrate	
FUIIIat	Wiappei	Quality	Nesolution	Frame	Rate	Wax bitiate	
XAVC Intra		4:2:2 10bit	4096X2160	60p/30p/24p	50p/25p	600/300/200Mbps (60Hz) 500/240Mbps (50Hz)	
			3840X2160	60p/30p/24p	50p/25p	600/300/200Mbps (60Hz) 500/240Mbps (50Hz)	
	MXF		1920X1080	60p/30p/24p	50p/25p	600/300/200Mbps (60Hz) 500/240Mbps (50Hz)	
	IVIZ	4:2:0 8bit	3840X2160	60p	50p	150Mbps	
				30p/24p	25p	100Mbps	
XAVC Long				60p/60i/30p/24p	50p/50i/25p	50Mbps	
		4:2:2 10bit	1920X1080	60p/60i/30p/24p	50p/50i/25p	35Mbps	
				60i	50i	25Mbps	
AVCHD	M2ts	4:2:0 8bit	1020V1000	60p	50p	28Mbps	
AVCHU	IVIZES		1920X1080	60p/30p/24p	50p/25p	24Mbps	

PX\/\-\X7()

1.0 type Exmor R® CMOS sensor compact **XDCAM** camcorder

With the 4K-ready 1.0 type Exmor R® CMOS sensor, the camcorder delivers high resolution, high sensitivity, low noise, and wide dynamic range

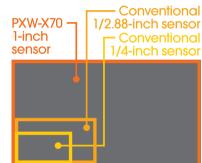


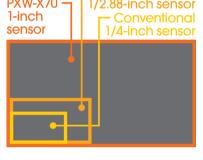
Network features of streaming, FTP transfer (XAVC 4K/HD and AVCHD formats) and Wired LAN connection allows content files to be sent over Internet for viewing or remote storage on an FTP server

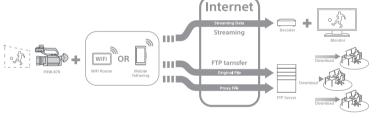
Options for QFHD & MPEG 2 HD recording



PXW-X70











CBKZ-X70FX CBKZ-SLMP

Format	Resolution	60Hz	50Hz	Max bitrate		
FUIIIat	nesolution	Frame	Frame Rate			
XAVC QFHD*	3840X2160	30p,24p	25p	60Mbps		
	1920X1080	60p/60i/30p/24p	50p/50i/25p	50Mbps		
XAVC Long	1920X1080	60p/60i/30p/24p	50p/50i/25p	35Mbps		
	1920X1080	60i	50i	25Mbps		
	1920X1080	60i/30p/24p	50i/25p	FOMIL		
	1280X720	60p	50p	50Mbps		
MPEG2 [▲]	1920X1080	60i/30p/24p	50i/25p			
	1440X1080	60i/30p/24p	50i/25p	35Mbps		
	1280X720	60p	50p			
	1920X1080	60p	50p	28Mbps		
AVCHD	1920X1080	60i/30p/24p	50i/25p	24/17Mbps		
	1280X720	60p	50p	24/17/9Mbps		
DV	720X576		50i	25Mbps		
DV	720X480	60i		25Mbps		

Optional CBKZ-X70FX

[▲] Optional CBKZ-SLMP

PXW-X200

Three 1/2-inch Exmor® CMOS sensor Full-HD XDCAM camcorder



PXW-X200

The lens have three independent control rings with end-stop allows manual control of focus, zoom and iris for better and faster adjustment

Iris ring

Zoom ring

Focus ring

Support shooting at XAVC HD, MPEG HD 422 50 Mbps, MPEG HD 420 35 Mbps, DVCAM at 25 Mbps in MXF file format and MPEG IMX at 50 Mbps in UDF mode

Capable of wireless operation including remote control, file transfer, monitoring via smartphones and tablet devices, and streaming



F	Decelution	60Hz	50Hz	Max bitrate			
Format	Resolution	Frame	Frame Rate				
XAVC Intra	1920X1080	60i/30p/24p	112Mbps				
	1280X720	60p	50p	112Mbps			
XAVC Long	1920X1080	60p/60i/30p/24p	50p/50i/25p	50/35Mbps			
AAVC Long	1280X720	60p	50p	50Mbps			
	1920X1080	60i	50i	25Mbps			
	1920X1080	60i/30p/24p	50i/25p	50Mbps			
	1280X720	60p/30p/24p	50p/25p	50Mbps			
	1920X1080 1440X1080	60i/30p/24p	50i/25p	35Mbps			
MPEG 2	1280X720	60p/24p	50p	35Mbps			
	1440X1080	60i/24p	50i	SP			
	720X576*		50i	50Mbps			
	720X480*	60i		50Mbps			
DV	720X576		50i	25Mbps			
DV	720X480	60i		25Mbps			

^{*} Only in UDF mode

PXV/-X180/PXV

Three 1/3-inch Exmor® CMOS sensor Full-HD XDCAM camcorder

G Series fixed 25x professional HD zoom lens provides 26mm wide angle zoom with three independent rings with endstop and large focal length

Support shooting at Full HD XAVC Intra and XAVC Long GOP, as well as MPEG HD 422 50 Mbps, MPEG HD 420 35 Mbps, AVCHD and DV format

Network features of streaming and FTP transfer (XAVC 4K/HD and AVCHD formats) allows content files to be sent over Internet for viewing or remote storage on an FTP server

(*network features available for PXW-X180 only)







PXW-X180



Innovative Sony image sensor, image processor and lens achieve outstanding image quality

Format	Resolution	60Hz	50Hz	– Max bitrate
ronnat	Resolution	Frame	Rate	- Max Ditrate
XAVC Intra	1920X1080	60i/30p/24p	50i/25p	112Mbps/89Mbps (24p)
XAVC IIIIIa	1280X720	60p	50p	112Mbps
	1920X1080	60p/60i/30p/24p	50p/50i/25p	50/35Mbps
XAVC Long	1280X720	60p	50p	50Mbps
	1920X1080	60i	50i	25Mbps
	1920X1080	60i/30p/24p	50i/25p	50Mbps
	1280X720	60p/30p/24p	50p/25p	50Mbps
MPEG 2	1920X1080	60i/30p/24p	50i/25p	35Mbps
	1440X1080	60i	50i	35Mbps
	1280X720	60p	50p	35Mbps
AVCHD	1920X1080	60p/60i/30p/24p	50p/50i/25p	28Mbps (60p/50p) 24Mbps (60i/30p/24p/50i/25p)
	1280X720	60p	50p	24Mbps
DV	720X576		50i	25Mbps
DV	720X480	60i		25Mbps

HXR-MC250C

1/4-inch Exmor R® CMOS sensor HD/SD **AVCHD** camcorder

Its highly-sensitive sensor utilize incidental light more efficiently and achieve rich image quality even during low-light shooting situations



Optical SteadyShot with active mode ensures smooth movement while recording footage even when shooting while walking



SteadyShot off



A 32GB internal flash memory enables longer duration recording of more than 150 minutes which is ideal for long event shooting



SteadyShot w/Active Mode on

Format	Resolution	60Hz	50Hz	Max bitrate	
FUIIIIat	nesolution	Frame	iviax bitiate		
	1920X1080	60p	50p	28Mbps	
	1920X1080	60i/30p/24p	50i/25p	24Mbps	
AVCHD	1280X720	60p	50p	24Mbps	
AVCHD	1920X1080	60i/30p/24p	50i/25p	17Mbps	
	1280X720	60p	50p	17Mbps	
	1280X720	60p	50p	9Mbps	
DV	720X576		50i	25Mbps	
DV	720X480	60i		25Mbps	

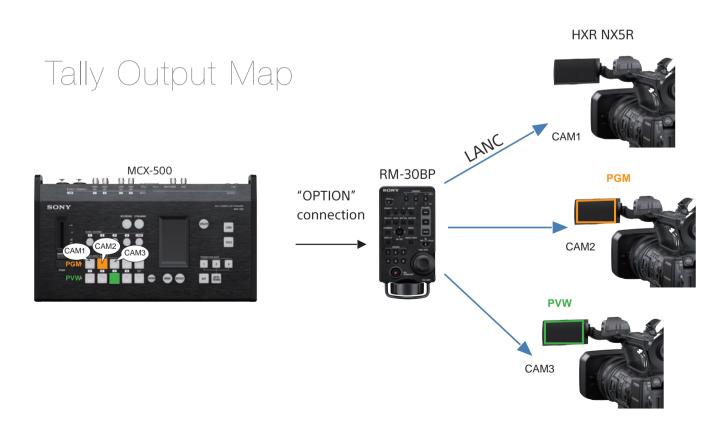
^{*} On Screen Image Simulated

MCX-500

Affordable Multi Camera Live Producer



- Multiple Input terminal with 9x Input (4x3G-SDI, 2x HDMI, CVBS/RGB for DSK) (BACK PANEL)
- Multi function with simple operability by equipping with touch screen & hard button for performing streaming, PGM recording or Audio mixing
- Provide Low-cost multi camera operation by working with RM-30BP for providing tally output support to Camcorders



RM-30BP

Compact Multi Function Remote (LANC) Controller

- This lightweight remote can be handheld, placed on a table or attached to a tripod arm for operation
- RM-30BP can control most camera functions including:





Multiple system operation:

- 3 remote output for multi camera operation
- 1 remote for daisy chain
- 1 connection with MCX-500

(Rec SS and Tally control from MCX-500)



- Lens control: one push auto / manual focus, iris and zoom control
- Camera control: recording / display functions, shutter speed, white balance including six assignable buttons
- Playback and multi-camera control (up to 3 cameras)



PMW-PZ1

4K SxS memory player



USB interface for connection to an external USB storage device, enables users to copy data in SxS media with copy log directly to external storage without the need for other devices

Direct playback from SxS memory cards or from an external USB storage device

Equipped with a host of versatile input and output interfaces, including a HDMI port and four 3G/HD-SDI outputs

(2 sample interleave, Square division)

Resolution		Format			59.94P	50P	29.97P	25P	24P	23.98P	59.94i	50i
4096x2160	4K	XAVC-Intra	Class480				✓	✓	*1	✓		
4090X2100	41	XAVC-IIItia	Class300		✓	✓	✓	✓	*1	✓		
		XAVC-Intra	Class480	.MXF			~	✓		✓		
3840x2160	OFHD	XAVC-IIItia	Class300		✓	✓	~	✓		✓		
	QFND	XAVC-Long	AVC-Long		✓	✓	✓	✓		✓		
		XAVC-S-Long	.MP4	✓	✓	✓	✓		✓			
2048x1080	2K	XAVC-Intra					TB	C				
		XAVC-Intra	Class100	.MXF	✓	✓	✓	✓		✓	✓	✓
		XAVC-Long			✓	✓	✓	✓		✓	✓	✓
1920x1080		XAVC-S-Long XDCAM MPEG-422 XDCAM MPEG-420		.MP4	✓	✓	✓	✓		✓		
192001060				.MXF			✓	✓		✓	✓	✓
				.IVIAF			~	✓		✓	~	✓
	HD	XDCAM EX MPEG-420		.MP4			~	✓		✓	~	✓
		XAVC-Intra	Class100		✓	✓						
		XAVC-Long		.MXF	✓	✓						
1280x720		XDCAM MPEG-422	XDCAM MPEG-422		✓	✓						
		XDCAM MPEG-420			✓	✓						
		XDCAM EX MPEG-420		.MP4	✓	✓						

^{*1} Under Development

Q7SII

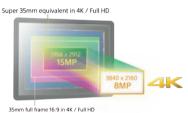
E-mount Camera with Full-Frame Sensor

- Extra sensitivity, wide dynamic range, accurate focusing, and unshakeable stability for shooting with solid assurance
- Support 14-bit uncompressed RAW format for unbeatable quality and range of tonal nuance

Allows 4K recording at up to 100 Mbps bit rate with XAVC S format to capture detailed movies with minimal compression noise. Supports professional video features include S-Gamut3.Cine/S-Log3 profile. Files are saved in widely compatible MPEG-4 AVC/H.264 format







Q7R11

E-mount Camera with back-illuminated full-frame image sensor

World's first* 35 mm back-illuminated full-frame image sensor provides higher resolution, sensitivity, and readout speed

(*among digital cameras with a full-frame image sensor. As of June 2015 press release, based on Sony research)

- Fast Hybrid AF system's dense extra-wide focal plane phase-detection AF coverage keeps a subject in sharp focus entirely throughout the frame
- 5-axis image stabilization reduces blur which otherwise tends to affect handheld shots





Accessories for Professional Camcorder





Wireless Microphone UWP-D Series

UWP-D11/D12/D16



Digital Audio Processing improves transient response performance between transmitter and receiver providing impressive natural sound quality compared to conventional analogue wireless systems

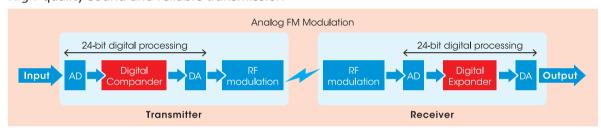






UWP-D11

High-quality sound and reliable transmission



Using SMAD-P3 MI shoe adapter, the portable receiver (URX-P03) could work with selected camcorders without audio cable and get power



URX-P03D dual channel portable wireless receiver

- Communicating with two UWP Series or WL-800 transmitters at the same time
- Equipped with external microphone input & 3 channel mixing function





3 channel mixing function



Recording Media

SXS Memory Card – Ultra High Speed Memory Card

SBP-64/128/256 (SxS Pro+) SBS-32G1/64G1/128G1 (SxS-1)

- Up to 440MB/s* Read speed, Up to 350MB/s* write speed (SxS Pro+)
- Up to 440MB/s* Read Speed (SXS-1)
- Guaranteed Minimum Writing Speed 160MB/s* (SXS PRO+)
- PCI-e Gen2 , Express Card /34







XQD Memory Card – Extreme High Speed Memory Card

XQD-G32/G64/G128

- Up to 440MB/s* Read Speed, Up to 400MB/s* Write Speed (XQD G)
- Up to 440MB/s* Read Speed, Up to 150MB/s* Write Speed (XQD M64/M128)
- PCI-e Gen2, USB3.0
- The USB adaptor will be sold separately for G series







SD Card for Professional - High Durability and File Recovery Support Memory Card

SF-32P (SDHC) / 64P (SDXC) / G1P** (SDXC





■ File rescue support**** for AVCHD and XAVC-S

* : Based on Sony testing

** : also known as 128GB

*** : At bending test

**** : http://www.sony.net/Products/memorycard/en_us/datarescue/











Memory Card Codec Compatibility Chart

	XAVC Intra 422	XAVC Intra 422	XAVC Long 420	XAVC Intra 422	XAVC Long 422	MPEG HD 422	XAVC S	AVCHD
	4096 x 2160	3840 x 2160	3840 x 2160	1920 x 1080	1920 x 1080	1920 x 1080	3840 x 2160 1920 x 1080	1920 x 1080 1280 x 720
SXS PRO+	0	0	0	0	0	0	-	-
SXS-1	-	-	O*1	O*2	0	0	-	-
XQD-G	-	-	0	0	0	0	-	-
XQD-M	-	-	0	O*2	0	0	-	-
SF-G1P (SDXC)	-	-	O*1	-	0	O*3	0	0
SF-64P (SDXC)	-	-	O*1	-	0	O*3	0	0
SF-32P (SDHC)	_	_	_	_	-	-	-	0

^{*1} Not compatible with 150Mbps



^{*2} Not compatible with 222Mbps

^{*3} Not Compatible with Slow & Quick Mode

Professional Camcorder Line-up Chart

	Affordable Shoulder	Compact	Camcorder		3-Chips Camcorder			
Model	Camcorder	HXR-NX100	PXW-X70	HXR-NX5R ^{NOWI}	PXW-X180/PXW-X160	PXW-X200	NEX-EA50	
PAL/NTSC	HXR-MC2500 PAL or NTSC	PAL or NTSC	Switchable	PAL or NTSC	PAW-A18U/PAW-A10U	hable	NEX-EASU	
Туре								
	WIFT CHAPTER OF THE INTERPRETATION OF THE IN	XAVC S mi Multi	XAVC Wifel Comment Wifel Multi- Multi	XAVC S WIFE N III Multi Interface Shoe	XAVC Ti MittraceShoe WIFT N (PXW-X180 only)	XAVC WIFE N IN Multi Interface Shoe		
Highlighted Features	Higher sensitivity Built-in LED Light Longer Rec time with 14 hours (NP-F970) Simultaneous & Relay Rec OLED Viewfinder Hi-Res LCD 921K Wi-Fi TC/UB	Good Sensitivity Shallow Depth of Field with 1.0 inch Sensor XAVC S , AVCHD Internal ND Filter	Good Sensitivity & Shallow Depth of Field with 1.0 inch Sensor XAVC Long GOP 3G-SDI Output Internal ND Filter Wi-Fi Optional upgrade: XAVC [4K QFHD] Long GOP MPEG HD 422/420	Powerful 40x Clear Image Zoom Image Zoom Internal ND Filter Built-in adjustable LED light Wi-Fi 3G-SDI Output OLED EVF & MI Shoe	Multi recording format & recording media Powerful 25x Optical Zoom 26mm wide-angle Variable ND Filter Wi-Fi (for PXW-X180)	High Sensitivity of 1/2 inch sensor Multi recording format Wi-Fi	APSC size Interchance Lens	
	1-chip	1-chip	1-chip	3-chips	3-chips	3-chips	1-chip	
Imager	1/4" EXMOR R CMOS	1.0" EXMOR R CMOS	1.0" EXMOR R CMOS	1/2.8" EXMOR CMOS	1/2.8" EXMOR CMOS	1/2" EXMOR CMOS	APS-C EXMOR	
Focal Length	26.8-321.6 mm	29-348 mm	29-348 mm	28.8-576mm	26-650 mm	29.3-499 mm	SELP18200 (SELP18200 (29-322 m	
Zoom	Optical Zoom 12x Zx Clear Image Zoom (24x) Digital Zoom 200x	Optical Zoom 12x 2x Clear Image Zoom (24x) 2x Digital Extender (48x)	Optical Zoom 12x 2x Clear Image Zoom (24x) 2x Digital Extender (48x)	Optical Zoom 20x 2x Clear Image Zoom (40x)	Optical Zoom 25x	Optical Zoom 17x	Optical Zoc 2x Digital Z	
ND Filter	-	Clear, 3 stops	Clear, 3 stops	Clear, 3 stops	Clear, 3 stopsVariable ND Filter (1/4-1/128)	Clear, 2 stops	-	
Recording Slot	Internal 32GBMS/SD Slot x1	• MS/SD slot x1 • SD slot x1	• MS/SD slot x1 • SD slot x1	• MS/SD slot x1 • SD slot x1	SxS Slot x2SD Slot x1 for utilitySD Slot x1 for proxy (PXW-X180 only)	• SxS Slot x2 • SD Slot (for proxy) x1	• MS/SD Sk • Flash Memo Slot x1	
Recording Media	MS/SD Card	MS/SD Card	MS/SD Card	MS/SD Card	SxS Card (XQD/MS/SD card by adapter) SD Card for Proxy (PXW-X180 only)	SxS Card (XQD/MS/SD card by adapter) SD Card (for Proxy)	• MS/SD C • Flash Memo (HXR-FMU)	
Recording Format	• AVCHD 2.0 • DV	• XAVC \$ (HD) • AVCHD 2.0 • DV	XAVC Long GOP AVCHD 2.0 DV MP4 (Proxy Rec) Optional Upgrade: XAVC [4K QFHD] Long GOP MPEG HD 422/420	• XAVC \$ (HD) • AVCHD 2.0 • DV	• XAVC Intra • XAVC Long GOP • MPEG HD422/420 • AVCHD 2.0 • DV • MP4 (Proxy Rec) (PXW-X180 only)	• XAVC Intra • XAVC Long GOP • MPEG HD422/420 • IMX • DV • MP4 (Proxy Rec)	• AVCHD • MPEG2 • DV	
SDI Output	-	-	3G-SDI x1	3G-SDI x1	3G-SDI x1	3G-SDI x1	-	
HDMI Output	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type	
Component Output	-	-	-	-	-	-	RCA Pin :	
Composite (A/V) Output	BNC x1	BNC x1	Integrated into multi/ micro USB Jack x1	BNC x1	BNC x1	BNC x1	RCA Pin	
Supplied Battery/ Charger/ Adaptor	Charger & Adaptor: AC-L100 Battery: NP-F570	Charger & Adaptor : BC-L1 & AC-L100C Battery: NP-F770	Charger & Adaptor: AC-L200 Battery: NP-FV70	Charger & Adaptor : BC-L1 & AC-L100C Battery: NP-F770	Charger & Adaptor: BC-U1 Battery: BP-U30	Charger & Adaptor: BC-U1 Battery: BP-U30	• Charger & A AC-VL1 • Battery: NP	

^{*}Additional external RAW Recorder
**Optional extension unit

		LFS Camcorder (Interchangea	ble Lens)		4K Compact Camcorder	4K Hand-held Camcorder
/K	NEX-FS700R/RH	PXW-FS5/FS5K	PXW-FS7	PXW-FS7M2/PWX-FS7M2K	PXW-Z150	PXW-Z100
		Switchable		Switchable	Switchable	Switchable
٦ж(C/VIII	XDC	1///	XDC/M	XDC/M	XDC/M
	4K	XAVC WFF CENTRED Mill Interface Shoe	XAVC WIFT CHITTED IN THE Trace Stope	XAVC WIFI Certures In Market Interface Shoe	XAVC W/Fi	XAVC WIFI CERTIFICAL
ensor able	Super 35mm Sensor Interchangeable Lens Super slow-motion up to 960 fps (40x slow-motion) 4K/2K raw output capability*	4K Super 35mm Sensor Internal recording 4K @30 fps Super slow-motion Full HD up to 240 fps Support for S-Gamut3.Cine/ S-Log3/S-Gamut3	4K Super 35mm Sensor Internal recording 4K @60 fps Super slow-motion continous shooting Full HD up to 180 fps Support for S-Gamut3. Cine/S-Log3/S-Gamut3 Extended Unit (XDCA-FS7) 4K/2K raw output capability* Wi-Fi	4K Super 35mm Sensor Internal recording 4K @60 fps Super slow-motion continuous shooting Full HD up to 180 fps Support for S-Gamut3. Cine/S-Log3/ S-Gamut3 Extended Unit (XDCA-FS7) 4K/2K raw output capability* Wi-Fi	Good Sensitivity & Shallow Depth of Field with 1.0 inch Exmor RS Sensor 3840X2160 QFHD recording & HFR up to 120fps 3 manual lens ring with internal ND filter Wi-Fi	4K Hand-held form factor Able to record 4K (4096x2160)@60p 4K@60p output via single HDMI cable Wi-Fi
	1-chip	1-chip	1-chip	1-chip	1-chip	1-chip
смоѕ	Super 35mm EXMOR CMOS	4K Super 35mm EXMOR CMOS	4K Super 35mm EXMOR CMOS	4K Super 35mm EXMOR CMOS	1.0" EXMOR RS CMOS	1/2.3" EXMOR R CMOS
Z) / 1Z) 1	NEX-FS700RH: SELP18200 (PZ) 30.6-340 mm	SELP18200 (PZ) PXW-F55K: SELP18105G (PZ) - PXW-F57M		PXW-FS7M2K : SELP18110G, F4 G OSS 18-110 mm	29-348 mm	30-600 mm
n 11x om	-	-	-	6X	 Optical Zoom 12x Clear image Zoom 18x/24x (4K/HD) Digital Zoom 48x (HD) 	Optical Zoom 20x
	Clear, 3 stops	Clear, 3 stops Variable ND Filter (1/4-1/128)	Clear, 3 stops	Clear, 3 stops Variable ND Filter (1/4-1/128)	Clear, 3 stops	Clear, 3 stops
x1 y Unit	• MS/SD Slot x1 • Flash Memory Unit Slot x1	MS/SD Slot x1 SD Slot x1	• XQD Slot x2 • SD Slot x1 (for utility)	• XQD Slot x2 • SD Slot x1 (for utility)	• MS/SD Slot x1 • SD Slot x1	XQD Slot x2 MS/SD Slot x1 (for AVCHD)
rd / Unit 8)	• MS/SD Card • Flash Memory Unit (HXR-FMU128)	MS/SD Card	XQD Card	• XQD Card	• MS/SD Card	• XQD Card • MS/SD Card (for AVCHD)
0	• AVCHD 2.0 • MPEG2 SD	• XAVC [4K QFHD/HD] Long GOP • AVCHD 2.0 • MPEG HD 422/420 Optional Upgrade: • MPEG HD 422/420	XAVC 4K (4096 x 2160) XAVC [4K QFHD/HD] Intra XAVC [4K QFHD/HD] Long GOP MPEG HD422 Apple ProRes 422**	XAVC 4K (4096 x 2160) XAVC [4K QFHD/HD] Intra XAVC [4K QFHD`/HD] Long GOP MPEG HD422 Apple ProRes 422**	• XAVC Long GOP • MPEG HD 422/420 • DV • AVCHD 2.0 • MP4 (Proxy Rec)	• XAVC [4K (4096x2160)/HD] Intra • XAVC [4K QFHD/HD] Long GOP • AVCHD 2.0
	3G-SDI x1	3G-SDI x1	3G-SDI x2	3G-SDI x2	3G-SDI x1	HD/SD-SDI x1
хl	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1	HDMI Type A x1
	Mini D Terminal x1	-	-	-	<u>-</u>	-
	RCA Pin x1	-	-	-	RCA Pin x1	RCA Pin x1
aptor: 770	 Charger & Adaptor: AC-VL1 Battery: NP-F770 	 Charger & Adaptor: BC-U1 & AC-UES1230 Battery: BP-U30 	 Charger & Adaptor: BC-U1 & MPA-AC1 Battery: BP-U30 	 Charger & Adaptor: BC-U1 & AC-NB12A Battery: BP-U30 	 Charger & Adaptor: BC-L1 & AC-L100C Battery: NP-F770 	 Charger & Adaptor: AC-VL1 & AC-NB12A Battery: NP-F970

Professional Camcorder Accessories

M	odel	Battery/Kit	Charger	Memory Card (For the model detail and compatible series, please refer to brochures)		Microph
Shoulder	HXR-MC2500	20	3 88	SD/SDHC Card up to 32GB SDXC Card up to 64GB MS card up to 32GB	ECM-CG60	ECM-W1M
	HXR-NX100	2NP-F970/B	ACC-L1BP	SD/SDHC Card up to 32GB SDXC Card up to 128GB MS card up to 32GB	ECM-WS2	
Compact	PXW-X70	NP-FV70/ FV100A	ACC-V1BPA	SD/SDHC Card up to 32GB SDXC Card up to 64GB MS card up to 32GB		1,
	HXR-NX5R	2NP-F970/B	ACC-L1BP			ECM-W1M
3-Chip	PXW-X180/ PXW-X160	2BP-U60/2	BC-U1/ U2	MS		
	PXW-X200	BP-U30/ U60/U60T/ U90	ACC-U60	*MEAD-SD/SDHC SD/SDHC SDXC Card up to 32GB * 128GB * *MEAD-SD/SDHC Card up to 32GB * *MEAD-SD/SDHC Card up to 40 to 64 GB EX1 *XQD + QDA-card up QDA-to 64 GB EX1 *XQD + QDA-card up to 64 GB EX1 *XQD + QDA-card up to 64 GB EX1 *XQD + QDA-to 64 GB	ECM-VG1/	
	NEX-EA50				ECM-MS2/	
Large	NEX-FS700	2NP-F970/B	ACC-L1BP	SD/SDHC Card up to 32GB SDXC Card up to 64GB MS card up to 32GB HXR-FMU128	ECM 678/ ECM 680S	ı
Format Sensor	PXW-FS5	00		SD/SDHC Card up to 32GB SDXC Card up to 128GB MS card up to 32GB		
	PXW-FS7	2BP-U60/2	BC-U1/ U2			ECM-W1M
	PXW-FS7M2/ PWX-FS7M2K	BP-U30/ U60/U60T/ U90		XQD Card up to 128GB		
4K Hand-Held	PXW-Z100					
4K Compact	PXW-Z150	2NP-F970/B	ACC-L1BP	SD/SDHC Card up to 32GB SDXC Card up to 64GB MS card up to 32GB	ECM-WS2	

<sup>Not all the accessories is listed
For PXW-X160 only</sup>

Wireless can be achieved by supported Wifi/3G/4G/LTE Dongle
 ** PXW-X180 only

one		Wired LAN Connection	Wireless	Video Light	Conversion Lens	Remote Commander	Raw Recording Products	Extension Unit	Camcorder Support	Carrying Case
				HVL-LBPC	VCL- HG0872K	RM-1BP				
	SMAD-P3D	CBK-NA1R VMC-UAM1				RM-VPR1				
					VCL- HG0872K	RM-1BP RM-30BP				
UWP-D11		CBK-NAIR CBK-NAIR	CBK-WA100*			RM-1BP				LCS-G1BP
UWP-D16										
UWP-D16				HVL-LBPC		RM-1BP	HXR-IFR5 AXS-R5 BP-FL75 AXS-BC-L90 AXS-CR1 512S24		VCT- SP2BP	
	SMAD-P3D		CBK-WA100			RM-30BP	HXR-IFR5 AXS-R5 BP-FL75 AXS-BC-L90 AXS-CR1 512S24	XDCA-FS7	VCT-FS7	
						RM-1BP				
	SMAD-P3D				VCL- HG0872K	RM-1BP RM-30BP				LCS-G1BP

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