PXW-Z90

1.0 type Exmor RS CMOS sensor palm-sized XDCAM camcorder with XAVC 4K, Fast Hybrid AF, Instant HDR Workflow & 3G-SDI

Specifications

General	
Important Note	PXW-Z90 is available from Sony as two SKUs. PXW-Z90V supports both 5Ghz and 2.4Ghz Wi-Fi. PXW-Z90T supports 2.4GHz Wi-Fi. Availability is determined by country/regional regulations.
Mass	Approx 1020g (with lens hood, eyecup) Approx. 2 lb 4.0 oz (with lens hood,eyecup) Approx. 1390g (with lens hood, handle, eyecup, NP-FV70A battery) Approx. 3lb 1oz (with lens hood, handle, eyecup, NP-FV70A battery)
	121.0mm×104.0mm×274.5mm (With the accessories (lens hood, large eyecup) ,excluding the grip belt and including the projecting parts)

Dimensions (W x H x D)	4 7/8 x 4 1/8 x 10 7/8 inches (With the accessories (lens hood, large eyecup) ,excluding the grip belt and including the projecting parts) 130.0 x 181.5 x 287.0 mm (With the accessories (lens hood, large eyecup, XLR handle unit) , excluding the grip belt and including the projecting parts) 5 1/8 x 7 1/4 x 11 3/8 inches (With the accessories (lens hood, large eyecup, XLR handle unit) , excluding the grip belt and including the projecting parts)
Power Requirements	DC In: 8.4V Battery: 7.4V
Power Consumption	Approx. 6.5 W(while recording with viewfinder and XAVC QFHD 2160/30p 60Mbps) Approx. 6.9 W (while recording with LCD and XAVC QFHD 2160/30p 60Mbps)
Operating Temperature	0°C to 40°C 32°F to 104°F
Storage Temperature	-20°C to +60°C -4°F to +140°F
Battery Operating	Approx. 140min. with NP-FV70A battery (while recording with LCD, XAVC QFHD 2160/30p, 60Mbps)

Time	Approx. 265 min. with NP-FV70A battery (while playing with LCD, XAVC QFHD 2160/30p, 60Mbps)
Recording Format (Video)	XAVC QFHD : MPEG-4 AVC/H.264 4:2:0 Long profile XAVC HD : MPEG-4 AVC/H.264 4:2:2 Long profile XAVC Proxy : MPEG-4 AVC/H.264 4:2:0 Long profile MPEG HD422 (CBKZ-SLMP required) : MPEG-2 422P@HL 4:2:2 Long profile MPEG HD420 (CBKZ-SLMP required) : MPEG-2 MP@HL 4:2:0 Long profile MPEG HD Proxy (CBKZ-SLMP required) : MPEG-4 AVC/H.264 4:2:0 Long profile AVCHD : MPEG-4 AVC/H.264 AVCHD 2.0 format compatible
Recording Format (Audio)	XAVC QFHD : Linear PCM 2ch, 24bit, 48kHz XAVC HD : Linear PCM 2ch, 24bit, 48kHz XAVC Proxy : AAC-LC 2ch 16bit48kHz MPEG HD422 (CBKZ-SLMP required) : Linear PCM 2ch, 24bit, 48kHz MPEG HD420 (CBKZ-SLMP required) : Linear PCM 2ch, 16bit, 48kHz MPEG HD Proxy (CBKZ-SLMP required) : AAC-LC 2ch16bit

		48kHz AVCHD : Linear PCM 2ch, 16bit, 48kHz / Dolby Digital 2ch, 16bit, 48kHz
	Recording Frame Rate	XAVC QFHD (3840 x 2160) @29.97p, 25p, 23.98p 100Mbps/60Mbps XAVC HD (1920 x 1080) @59.94p, 50p, 29.97p, 25p, 23.98p, 50Mbps/35Mbps XAVC HD (1920 x 1080) @59.94i, 50i, 50Mbps/35Mbps/25Mbps XAVC HD (1280 x 720) @59.94p, 50p, 50Mbps XAVC Proxy (1280 x 720) @59.94p, 50p, 29.97p, 25p, 23.98p, 9Mbps XAVC Proxy (640 x 360) @59.94p, 50p, 29.97p, 25p, 23.98p, 3Mbps MPEG HD422 (1920 x 1080) (CBKZ-SLMP required) @59.94i, 50i, 29.97p, 25p, 23.98p, 50Mbps MPEG HD422 (1280 x 720) (CBKZ-SLMP required) @59.94p, 50p, 50Mbps MPEG HD420 (1920 x 1080) @59.94i, 50i, 29.97p, 25p, 23.98p, HQ mode(35Mbps) MPEG HD420 (1440 x 1080) (CBKZ-SLMP required) @59.94i, 50i, HQ mode(35Mbps)
		MPEG HD420 (1280 x 720) (CBKZ-SLMP required) @59.94p,

Recording Frame Rate (Cont.)	50p, HQ mode(35Mbps) MPEG HD Proxy (1280 x 720) (CBKZ-SLMP required) @59.94p, 50p, 29.97p, 25p, 23.98p, 9Mbps MPEG HD Proxy (640 x 360) (CBKZ-SLMP required) @59.94p, 50p, 29.97p, 25p, 23.98p 3Mbps AVCHD (1920 x 1080)@59.94p, 50p, PS mode (28Mbps) AVCHD (1920 x 1080) @59.94i/50i FX mode (24Mbps) FH mode(17Mbps) AVCHD (1920 x 1080) @29.97p/25p/23.98p, FX mode (24Mbps) AVCHD (1440 x 1080)@59.94i, 50i LP mode (5Mbps) AVCHD (1280 x 720)@59.94p, 50p, HQ mode (9Mbps)
Recording/Playback	XAVC QFHD @LPCM 2ch 100 Mbps Approx. 65 min with 64 GB memory card XAVC QFHD @LPCM 2ch 60 Mbps Approx. 100 min with 64 GB memory card XAVC HD @LPCM 2ch 50 Mbps Approx. 120 min with 64 GB memory card XAVC HD @LPCM 2ch 35 Mbps Approx. 170 min with 64 GB memory card XAVC HD @LPCM 2ch 25 Mbps

Time	Approx. 220 min with 64 GB memory card MPEG HD422 (CBKZ-SLMP required) @LPCM 2ch 50 Mbps Approx. 110 min with 64 GB memory card MPEG HD420 (CBKZ-SLMP required) @LPCM 2ch HQ Mode Approx. 170 min with 64 GB memory card AVCHD @LPCM 2ch PS Mode Approx. 305 min with 64 GB memory card AVCHD @LPCM 2ch FX Mode Approx. 360 min with 64 GB memory card
Recording/Playback Time (cont.)	AVCHD @LPCM 2ch FH Mode Approx. 495 min with 64 GB memory card AVCHD @LPCM 2ch HQ Mode Approx. 880 min with 64 GB memory card AVCHD @LPCM 2ch LP Mode Approx. 1540 min with 64 GB memory card

Lens	
Lens Mount	Fixed
Zoom Ratio	12x (optical), servo
Focal Length	f=9.3 - 111.6mm equivalent to f=29.0 - 348.0mm on 35 mm lens(16:9)

	equivalent to f=32.8 - 393.6mm on 35mm lens(3:2)
Iris	F2.8 - F4.5 auto/manual selectable
Focus	AF/MF selectable 10 mm to ∞ (Wide) 1000 mm to ∞ (Tele)
Image Stabilizer	ON/OFF selectable, shift lens
Filter Diameter	M62 mm

Camera Section

Imaging Device (Type)	1.0-type (13.2mm x 8.8mm) back-illuminated Exmor RS CMOS sensor
Effective Picture Elements	Approx.14.2M pixels(16:9)/Approx.12.0M pixels(3:2)
Built-in Optical Filters	OFF: Clear, 1: 1/4ND, 2: 1/16ND, 3: 1/64ND
Minimum Illumination	Standard [60i] 3lux(1/60 Shutter Speed, gain 33dB) Standard [50i] 3lux(1/50 Shutter Speed, gain 33dB) LowLux [60i] 1.7lux(1/30 Shutter Speed, gain 33dB) LowLux [50i] 1.7lux(1/25 Shutter Speed, gain 33dB)
	[60i]: 1/8 - 1/10,000

Shutter Speed	(1/6 - 1/10,000 when shooting with 24p) [50i]: 1/6 -1/10,000
Slow & Quick Motion Function	[60i]:2160p:Frame rate selectable 1,2,4,8,15,30fps [50i]:2160p:Frame rate selectable 1,2,3,6,12,25fps [60i]:1080p:Frame rate selectable 1,2,4,8,15,30,60,120fps [50i]:1080p:Frame rate selectable 1,2,3,6,12,25,50,100fps
Super Slow Motion	[60i]1080p:Frame rate selectable 240,480,960fps [50i]:1080p:Frame rate selectable 250,500,1000fps
White Balance	PresetIndoor:3200K, Outdoor:5600K±7 steps, Color temparature set range:2300-15000K) Onepush A, B, Auto selectable
Gain	-3, 0, 3, 6, 9, 12,15, 18, 21, 24, 27, 30, 33 dB, AGC
Gamma Curve	Selectable

Streaming

Protocol	AVC / RTMP / RTMPS 1280x720 at 3Mbps 640x360 at 1Mbps

SONY

Input/Output

Audio Input	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable
Video Output	Integrated into Multi/Micro USB jack×1, Composite 1.0Vp-p, 75Ω
Audio Output	Integrated into Multi/Micro USB jack
SDI Output	BNC (x1), 3G/HD/SD SMPTE 424M/292M/259M standards
USB	Multi/Micro USB jack (x1)
Headphone Output	Stereo mini jack (x1)
Speaker Output	Monaural
DC Input	DC jack
Remote	Integrated into Multi/Micro USB jack Stereo mini-mini jack (Φ2.5mm)
HDMI Output	Type A (x1)

Monitoring

Viewfinder	1.0cm0.39 typeOLED Approx. 2.36M dots
LCD	8.8cm3.5 type) Approx. 1.56M dots

SONY

Built-in Microphone

Built-in Microphone	Omni-directional stereo electret condenser microphone

Media

Type	Memory Stick Pro Duo™ and SD/SDHC/SDXC compatible x1 SD/SDHC/SDXC x1

Wi-Fi/NFC

Supported format	IEEE 802.11 a/b/g/n/ac
Frequency band	2.4 GHz bandwidth 5.2/5.3/5.6/5.8 GHz bandwidth* * Depending on country / regional regulation and only on PXW-Z90V SKU.
Security	WEP/WPA-PSK/WPA2-PSK
NFC	NFC Forum Type 3 Tag compliant

Supplied Accessories

	XLR handle unit (1) Lens hood (1) Lens cap (1) Large eyecup (1)

Supplied Accessories	Accessory shoe kit (1) USB cable (1) Rechargeable battery pack (NP-FV70A) (1) AC Adaptor (AC-L200D) (1) Power cord (mains lead) (1) Wireless Remote Commander (RMT-845) (1) Lithium battery (CR2025 for the Wireless Remote Commander) (1), Pre-installed to the Wireless Remote Commander Operating Guide (2) CD-ROM "Manuals for Solid-State Memory Camcorderr" (1) Warranty (1)

Notes

*	[60i]: when [60i/50i SEL] is set to 60i [50i]: when [60i/50i SEL] is set to 50i

Product contains pre-installed software

	This product contains pre-installed software and requires the purchase of licence keys to activate some functions.

Related products

MCX-500

Multi-Camera Live Producer

Gallery