

General

Important Note

PXW-Z90 is available from Sony as two SKUs. PXW-Z90V supports both 5 GHz and 2.4 GHz Wi-Fi. PXW-Z90T supports 2.4 GHz 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)

Dimensions (W x H x D)

121.0mm×104.0mm×274.5mm (With the accessories (lens hood, large eyecup) ,excluding the grip belt and including the projecting parts)

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 Time

Approx. 140min. with NP-FV70A battery (while recording with LCD, XAVC QFHD 2160/30p, 60Mbps)

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, 16bit, 48kHz

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 2ch, 16bit, 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)

Recording Frame Rate (Cont.)

MPEG HD420 (1280 x 720) (CBKZ-SLMP required) @59.94p, 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 Time

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

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)

Shutter Speed

[60i]: 1/8 - 1/10,000

(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

Preset (Indoor:3200K, Outdoor:5600K±7 steps, Color temperature 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

1,280 x 720 at 3 Mbps

640 x 360 at 1 Mbps

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

1.0cm (0.39 type) OLED

Approx. 2.36M dots

LCD

8.8cm (3.5 type)

Approx. 1.56M dots

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 regulations and only on PXW-Z90V SKU.

Security

WEP/WPA-PSK/WPA2-PSK

NFC

NFC Forum Type 3 Tag compliant

Supplied Accessories

Supplied Accessories

XLR handle unit (1)

Lens hood (1)

Lens cap (1)

Large eyecup (1)

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 Camcorder" (1)
Warranty (1)

Notes

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

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