

General

Important Note

PXW-Z280 is available from Sony as two SKUs. PXW-Z280V supports both 5 Ghz and 2.4 Ghz Wi-Fi. PXW-Z280T supports 2.4 GHz Wi-Fi. Availability is determined by country/regional regulations.

Mass

Approx. 2.6 kg (body)

Approx. 5 lb 11.7 oz (body)

Approx. 3.0 kg (with lens hood, eyecup, BP-U35 battery, a SxS memory card)

Approx. 6 lb 9.8 oz (with lens hood, eyecup, BP-U35 battery, a SxS memory card)

Dimensions (W x H x D)

178.4 × 202.0 × 426.3 mm (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)

7 1/8 x 8 x 16 7/8 inches (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)

Power Requirements

DC In: 12 V

Battery: 14.4 V

Please use genuine Sony batteries to ensure correct and safe operation*2

Power Consumption

Approx. 24 W

(while recording with LCD Off, EVF On when the external device connector is not used.)

Approx. 36 W

(while recording with LCD On, EVF On when the external device connector is used.)

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. 1 hours, 20 minutes with BP-U35 battery

(while recording with LCD Off, EVF On when the external device connector is not used)

Approx. 1 hours, 5 minutes with BP-U30 battery

(while recording with LCD Off, EVF On when the external device connector is not used)

Approx. 2 hours, 10 minutes with BP-U60 battery

(while recording with LCD Off, EVF On when the external device connector is not used)

Approx. 3 hours, 15 minutes with BP-U90 battery

(while recording with LCD Off, EVF On when the external device connector is not used)

Recording Format (Video)

<XAVC Intra>

XAVC-I QFHD mode:

MPEG-4 AVC/H.264, variable bitrate, Max. 600 Mbps

XAVC-I HD mode:

MPEG-4 AVC/H.264, CBG, Max. 222 Mbps

<XAVC Long>

XAVC-L Quad Full High Definition mode:

Variable bitrate, maximum bit rate 150 Mbps, MPEG-4 H.264/AVC

XAVC-L HD 50 mode:

Variable bitrate, maximum bit rate 50 Mbps, MPEG-4 H.264/AVC

AVC-L HD 35 mode:

Variable bitrate, maximum bit rate 35 Mbps, MPEG-4 H.264/AVC

XAVC-L HD 25 mode:

Variable bitrate, maximum bit rate 25 Mbps, MPEG-4 H.264/AVC

<MPEG-2 Long GOP>

MPEG HD422 mode:

Constant bitrate, maximum bit rate 50 Mbps, MPEG-2 422P@HL

MPEG HD420 HQ mode:

Variable bitrate, maximum bit rate 35 Mbps, MPEG-2 MP@HL

<DVCAM>

DVCAM mode:

CBR, 25 Mbps, DVCAM

Recording Format (Audio)

<XAVC Intra>

XAVC-I mode:

LPCM 24-bit, 48 kHz, 4 channels:

<XAVC Long>

XAVC-L mode:

LPCM 24-bit, 48 kHz, 4 channels:

<MPEG-2 Long GOP>

MPEG HD422 mode:

LPCM 24-bit, 48 kHz, 4 channels:

MPEG HD420 HQ mode:

LPCM 16-bit, 48 kHz, 4 channels:

<DVCAM>

DVCAM mode:

LPCM 16-bit, 48 kHz, 4 channels

Recording Frame Rate

<XAVC Intra>

XAVC-I QFHD mode:

3840 x 2160/59, 94p, 50p, 29.97p, 23.98p, 25p

XAVC-I HD mode:

1920 x 1080/59, 94p, 59.94i, 50p, 50i, 29.97P, 23.98P, 25P

1280x720/59.94P, 50P

<XAVC Long>

XAVC-L QFHD 150 mode:

3840 x 2160/59.94P, 50P, 29.97P, 23.98P, 25P

XAVC-L HD 50 mode:

1920 x 1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P 1280 x 720/59.94P, 50P

XAVC-L HD 35 mode:

1920 x 1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P

Recording Frame Rate - Continued

XAVC-L HD 25 mode:

1920 x 1080/59.94i, 50i

<MPEG-2 Long GOP>

MPEG HD422 mode:

1920 x 1080/59.94i, 50i, 29.97P, 23.98P, 25P

1280 x 720/59.94P, 50P, 29.97P, 23.98P, 25P

MPEG HD420 HQ mode:

1920 x 1080/59.94i, 50i, 29.97P, 23.98P, 25P

1440 x 1080/59.94i, 50i

1280 x 720/59.94P, 50P

<DVCAM>

DVCAM mode:

720 x 480/59.94i, 29.97PsF

720 x 576/50i, 25PsF

Recording/Playback Time

<XAVC Intra>

XAVC-I QFHD mode

When using SBP-128B (128 GB):

Approx. 22 minutes

XAVC-I HD mode

When using SBP-128B (128 GB):

Approx. 57 minutes

<XAVC Long>

XAVC-L QFHD 150 mode

When using SBP-128B (128 GB):

Approx. 86 minutes

XAVC-L HD 50 mode

When using SBP-128B (128 GB):

Approx. 230 minutes

XAVC-L HD 35 mode

When using SBP-128B (128 GB):

Approx. 310 minutes

Recording/Playback Time — Continued

XAVC-L 25 mode

When using SBP-128B (128 GB):

Approx. 420 minutes

<MPEG-2 Long GOP>

MPEG HD422 mode

When using SBP-128B (128 GB):

Approx. 215 minutes

MPEG HD420 HQ mode

When using SBP-128B (128 GB):

Approx. 330 minutes

<DVCAM>

When using SBP-128B (128 GB):

Approx. 405 minutes

Recording Format (Proxy Audio)

XAVC Proxy: AAC-LC, 128 kbps, 2 channels

Recording Format (Proxy Video)

XAVC Proxy: AVC/H.264 Main Profile 4:2:0 Long GOP, VBR

1920 x 1080, 9Mbps

1280 x 720, 9Mbps

1280 x 720, 6Mbps

640 x 360, 3Mbps

480 x 270, 1Mbps

480 x 270, 0.5Mbps

Lens

Lens Mount

Fixed

Zoom Ratio

17x (optical), servo/manual

Focal Length

f = 5.6 - 95.2 mm

(35mm equivalent: 30.3 - 515 mm)

Iris

F1.9 - F16 and close

auto/manual selectable

Focus

800 mm to ∞ (Macro Off),

50 mm to ∞ (Macro On, Wide),

800 mm to ∞ (Macro On, Tele)

AF/MF/Full MF selectable

Image Stabilizer

On/Off selectable, shift lens

Filter Diameter

ϕ 3.03 inches, pitch 0.03 inches

Camera Section

Imaging Device (Type)

1/2 type back-illuminated Exmor R 3CMOS sensor

Effective Picture Elements

3840 (H) x 2160 (V)

Optical System

F1.6 prism system

Built-in Optical Filters

ND filters

OFF: CLEAR

1: 1/4ND

2: 1/16ND

3: 1/64ND

Linear variable ND (Approx. 1/4ND to 1/128ND)

Sensitivity (2000 lx, 89.9% reflectance)

F12 (typical, 1920 x 1080/59.94p mode)

F13 (typical, 1920 x 1080/50p mode)

F12 (typical, 3840 x 2160/59.94p, High Sensitivity Mode)

F13 (typical, 3840 x 2160/50p, High Sensitivity Mode)

Minimum Illumination

0.0013lx (typical)

(1920 x 1080/59.94i mode, F1.9, +42 dB gain, High Sensitivity Mode, with 64 frame accumulation)

S/N Ratio

63 dB (Y) (typical)

Horizontal Resolution

2,000 TV lines or more (3840 x 2160p mode)

1,000 TV lines or more (1920 x 1080p mode)

Shutter Speed

1/24 sec to 1/8,000 sec

Slow Shutter (SLS)

2, 3, 4, 5, 6, 7, 8, 16, 32, and 64-frame accumulation

Slow and Quick Motion Function

<XAVC Intra>

<XAVC Long>

2160P: 1-60 fps

1080P: 1-60 fps

720P: 1-60 fps

<MPEG HD422>

1080P: 1-30 fps

720P: 1-60 fps

<MPEG HD420 HQ>

1080P: 1-30 fps

720P: 1-60 fps

White Balance

Preset (3200K), Memory A,

Memory B/ATW

Gain

-3, 0, 3, 6, 9, 12, 15, 18 dB, 42 dB(Turbo Gain ON), AGC

Gamma Curve

Selectable

Streaming

Protocol *3

AVC / RTMP / RTMPS

1920 x 1080 at 9 Mbps

1920 x 1080 at 6 Mbps

1280 x 720 at 3 Mbps

640 x 340 at 1 Mbps

Input/Output

Audio Input

XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable
LINE : +4, 0, -3dBu/10k Ω
MIC : -80dBu to -30dBu /3k Ω
(0 dBu=0.775 Vrms)

Video Output

BNC (x1), HD-Y/ HD-SYNC/Composite
1.0 V p-p, 75 Ω
(switchable to Genlock in)

Audio Output

Integrated into Multi/Micro USB jack(x1)

SDI Output

BNC (x1), 12G/3G/HD/SD selectable

Timecode Input

BNC (x1) (switchable to TC out)
0.5V-1.8Vp-p, 3.3k Ω

Timecode Output

BNC (x1) (switchable to TC in)
1.0 V p-p, 75 Ω

Genlock Input

BNC (x1) (switchable to Video out) 1.0 Vp-p, 75 Ω

USB

USB device, Multi/Micro USB jack (x1)
Host: USB 3.0/2.0 type A(x1)
USB 2.0 type A(x1)

Headphone Output

Stereo mini jack (x1)
-16dBu 16 Ω

Speaker Output

Monaural
Output: 500 mW

DC Input

DC jack (x1)

Remote

Stereo mini-minijack (Φ 2.5 mm)

HDMI Output

Type A (x1)

Wired LAN

RJ-45 (x1), 1000BASE-T, 100BASE-T, 10BASE-T

Monitoring

Viewfinder

0.5 type (1.3 cm)
Approx 2.36 M dots

LCD

3.5 type (8.8cm)
Approx. 1.56M dots

Built-in Microphone

Built-in Microphone

Omni-directional stereo electret condenser microphone

Media

Type

ExpressCard/34 slot (x2)

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 GHz bandwidth*1

Security

WEP/WPA-PSK/WPA2-PSK

NFC

NFC Forum Type 3 Tag compliant

Supplied Accessories

Supplied Accessories

Lens hood (1), Pre-installed to the Camcorder

EVF eyecup (1)

Battery pack BP-U30 or U35 (1)

AC Adaptor/charger BC-U1A (1)

Power code (1)

USB cable (1)

Shoulder strap (1)

Warranty booklet (1)

"Before Using this Unit" (1)

CDROM "Operating instructions" (1)

Notes

***1**

Depending on country/regional regulation and only on PXW-Z280V SKU.

***2**

Sony does not guarantee other manufacturers' batteries to operate properly as noted in operation manual.

***3**

Requires V4 or higher firmware.