General

Important Note

PXW-Z190 is available from Sony as two SKUs. PXW-Z190V supports both 5 Ghz and 2.4 Ghz Wi-Fi. PXW-Z190T supports 2.4 GHz Wi-Fi. Availability is determined by country/regional regulations.

Mass

Approx. 2.3 kg (body)
Approx. 5 lb 1.1 oz (body)
Approx. 2.8 kg (with lens hood, eyecup, BP-U35 battery, a SD memory card)
Approx. 6 lb 2.8 oz (with lens hood, eyecup, BP-U35 battery, a SD memory card)

Dimensions (W x H x D)

190.0 × 202.0 × 419.7 mm (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)
7 1/2 x 8 x 16 1/2 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*1

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.)

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)

Operating Temperature

0°C to 40°C
32°F to 104°F

Storage Temperature

-20°C to +60°C
-4°F to +140°F

Recording Format (Video)

<XAVC Long>
XAVC-L QFHD mode:

VBR, maximum bit rate 150Mbps, MPEG-4 H.264/AVC
XAVC-L HD 50 mode:
VBR, maximum bit rate 50Mbps, MPEG-4 H.264/AVC
XAVC-L HD 35 mode:
VBR, maximum bit rate 35Mbps, MPEG-4 H.264/AVC
XAVC-L HD 25 mode:
VBR, maximum bit rate 25Mbps, MPEG-4 H.264/AVC

\<DVCAM>
DVCAM mode:
CBR, 25Mbps, DVCAM
Recording Format (Audio)
\<XAVC Long>
XAVC-L mode:
LPCM 24-bit, 48 kHz, 4 channels

\<DVCAM>
DVCAM mode:
LPCM 16-bit, 48 kHz, 4 channels
Recording Frame Rate
\<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
XAVC-L HD 25 mode:
1920 x 1080/59.94i, 50i

\<DVCAM>
DVCAM mode:
720 x 480/59.94i, 29.97PsF 720 x 576/50i, 25PsF
Recording/Playback Time
\<XAVC Long>
XAVC-L QFHD 150 mode
When using 128 GB memory card:
Approx. 88 minutes
XAVC-L HD 50 mode
When using 128 GB memory card:
Approx. 240 minutes
XAVC-L HD 35 mode
When using 128 GB memory card:
Approx. 325 minutes
XAVC-L 25 mode
When using 128 GB memory card:
Approx. 445 minutes

<DVCAM>
When using 128 GB memory card: Approx. 425 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 type

Zoom Ratio
25x
Focal Length
3.7 mm to 92.5 mm
(equivalent to 28.8 mm to 720 mm on a 35 mm lens)
Iris
Auto/manual swichable
F1.6 to F11 and C (close)
Focus
800 mm to ∞ (Macro Off)
10 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
M 82 mm , pitch 0.75 mm

Camera Section
Imaging Device (Type)
1/3 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)
F11 (typical, 1920 x 1080/59.94p, High Sensitivity Mode)
F12 (typical, 1920 x 1080/50p, High Sensitivity Mode)

Minimum Illumination
0.01 lx (typical)
(1920 x 1080/59.94i mode, F1.6, +30 dB gain, High Sensitivity Mode, with 64 frame accumulation)

S/N Ratio
57 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 Long>
2160P: 1-60 fps
1080P: 1-60 fps
720P: 1-60 fps

White Balance
Preset (3200K), Memory A,
Memory B/ATW

Gain
-3, 0, 3, 6, 9, 12, 15, 18 dB, 30 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/10kΩ
MIC : -80dBu to -30dBu /3kΩ
(0 dBu=0.775 Vrms)

Audio Output
Integrated into Multi/Micro USB jack(x1)

SDI Output
BNC (x1), 3G/HD/SD selectable
Timecode Input
BNC (x1) (switchable to TC out)
0.5V-1.8Vp-p, 3.3kΩ
Timecode Output
BNC (x1) (switchable to TC in)
1.0 V p-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 16Ω
Speaker Output
Monaural
Output: 500 mW
DC Input
DC jack
Remote
Stereo mini-minijack (Φ2.5 mm)
HDMI Output
HDMI connector (Type A)
Wired LAN
RJ-45 (x1), 1000BASE-T, 100BASE-T, 10BASE-T

Monitoring
Viewfinder
0.39 type (1.0 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
MS/SD(1),SD(1)

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*2
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)
Warranty booklet (1)
"Before Using this Unit" (1)
CDROM "Operating instructions" (1)

Notes

*1
Sony does not guarantee other manufacturers' batteries to operate
properly as noted in operation manual.

*2
Depending on country/regional regulation and only on PXW-Z190V SKU.
*3
Requires CBKZ-SLNW1 and V4 or higher firmware.