SONY

XDCAM
PXW-Z190

4K Handheld Camcorder with all-new 1/3-type 3CMOS with 4K 50p/60p* recording capability, 25x zoom lens and advanced Face Detection AF

* 59.94p

4K 50p/60p performance

The newly developed three 1/3-type Exmor R CMOS image sensors capture RGB light independently and deliver 4K 50p/60p imagery with high resolution and a wide range of gradation. In HD shooting, 4:2:2 10-bit ensures vivid and rich color content.

25x optical zoom lens with three independent rings

The PXW-Z190 is equipped with a 25x professional zoom lens able to zoom from 28.8mm to 720mm (35mm equivalent), with three independent control rings, which allows manual control of focus, zoom and iris, making for better and faster adjustment. The image can be enlarged without any picture degradation in an HD mode and a 50x zoom equivalent image is captured with sensor cropping extender.

Advanced Face Detection AF

The PXW-Z190 features newly developed Face Detection AF, selectable from Face Priority AF or Face Only AF. Simply keep the person in frame and however you move to obtain a better angle, you can be confident the PXW-Z190 will keep your subject in pin-sharp focus.

Built-in electronic Variable ND Filters

Sony's ground-breaking integration of electronic variable ND Filters into the body of a camcorder enables fast, agile shooting. Moving from shadowy interiors to bright sun-lit exteriors is no problem. Unlike conventional optical ND filters, the electronic ND filter on the PXW-Z190 can be controlled from 1/4ND to 1/128ND linearly while ND Filters can be set to fully auto. You can even manually adjust Depth of Field using the iris lens ring, while relying on the camcorder to maintain constant exposure without changing gain nor shutter speed.

Dual Multi-Interface (MI) Shoe and 4ch audio input

Dual MI shoe enables the use of a wireless microphone and video light at the same time to achieve further flexibility. When using Sony's UWP-D series wireless microphone**, audio signals can be delivered without cabling – eliminating the risk of accidental disconnection. Enhanced 4-channel audio recording is supported by a combination of 2 XLR inputs and audio input via an MI shoe.

Instant HDR workflow

Shoot, edit and view HDR content in HLG without the need for additional colour grading. Premium content services are switching to HDR and the PXW-Z190 is ready with Hybrid Log-Gamma (HLG) recording for easy file-based workflows, whilst achieving the image quality of HDR. This simple workflow enables the shooting, editing and viewing of HDR content in HLG without devoting a lot of time to post-production work and additional colour grading.

Network workflow flexibility

Install the free "Content Browser Mobile" app on your smartphone to operate the camera remotely controlling Iris, Zoom, Focus WB and other functions from the palm of your hand. The PXW-Z190 is also easily upgraded to offer all the below features with optional CBKZ-SLNW1.
- High quality QoS Streaming to Network RX station**.
- XDCAM air secure wireless workflow.
- MPEG TS UDP streaming to peripheral common receiver.
- FTP Transfer of proxy and high resolution clip to remote servers.
- Wired LAN streaming and file transfer.
- Trimming proxy and high resolution clip prior to sharing.

A wealth of formats and features for professional

The PXW-Z190 covers a wide range of main formats including XAVC-Long, DVCAM. In addition to these formats, MPEG HD 422 and MPEG HD are available with an optional license. Proxy 1080i up to 9Mbps can be utilized for 4K and HD simultaneous recording. Other features include 3G-SDI output and a remote terminal for compact multi-camera operation using Sony's MCX-500** production switcher and RM-30BP** controller.
** Optional

4K HDR Exmor R™ 3CMOS XAVC MPEG HD422** DVCAM SDHC SDXC WiFi CERTIFIED

25x optical zoom

Specifications
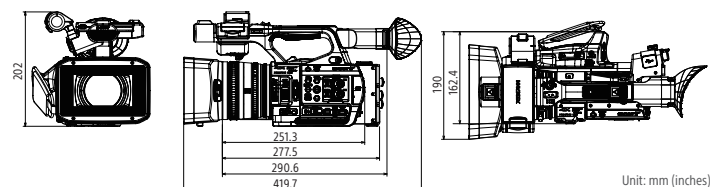
General	
Mass	Approx 2.3 kg (body)
	Approx. 5 lb 1.1 oz (body)
	Approx. 2.8 kg (with lens hood, eyecup, BP-U30 battery, a SD memory card)
	Approx. 6 lb 2.8 oz (with lens hood, eyecup, BP-U30 battery, a SD memory card)
Dimensions (W x H x D)	190.0 × 202.0 × 419.7 mm (With the accessories (lens hood, eyecup), 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: 12V
	Battery: 14.4 V
Power Consumption	Approx. 22W(while recording with LCD Off, EVF On when the external device connector is not used.)
	Approx. 29W(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)
Recording Format (Video)	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 mode:CBR, 25Mbps, DVCAM
Recording Format (Audio)	XAVC-L mode:LPCM 24-bit, 48kHz, 4 channels
	DVCAM mode:LPCM 16-bit, 48kHz, 4 channels
Recording Frame Rate	XAVC-L QFHD 150 mode:3840x2160/59.94P, 50P, 29.97P, 23.98P, 25P
	XAVC-L HD 50 mode: 1920x1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P 1280x720/59.94P, 50P
	XAVC-L HD 35 mode: 1920x1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P
	XAVC-L HD 25 mode: 1920x1080/59.94i, 50i
	DVCAM mode: 720x480/59.94i, 29.97PsF 720x576/50i, 25PsF
Recording/Playback Time	XAVC-L QFHD 150 mode When using 128GB memory card: Approx. 88 minutes
	XAVC-L HD 50 mode When using 128GB memory card: Approx. 240 minutes
	XAVC-L HD 35 mode When using 128GB memory card: Approx. 325 minutes
	XAVC-L 25 mode When using 128GB memory card: Approx. 445 minutes
	When using 128GB 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
	1920x1080, 9Mbps
	1280x720, 9Mbps
	1280x720, 6Mbps
	640x360, 3Mbps
	480x270, 1Mbps
	480x270, 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	0.02lx (typical) (1920 x 1080/59.94i mode, F1.6, +30 dB gain, High Sensitivity Mode, with 64 frame accumulation)
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 & 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, 18 dB, 30dB(Turbo Gain ON), AGC
Gamma Curve	Selectable

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) 1.0Vp-p, 75Ω
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: 500mW
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	1.0 cm (0.39 type)
	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	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
Security	WEP/WPA-PSK/WPA2-PSK
NFC	NFC Forum Type 3 Tag compliant

Supplied Accessoies	
Supplied Accessoies	Lens hood (1), Pre-installed to the Camcorder
	EVF eyecup (1), Pre-installed to the Camcorder
	Battery pack BP-U30 (1)
	Battery charger BC-U1A (1)
	Power Code (1)
	USB cable (1)
	Warranty Booklet (1)
	"Before Using this Unit" (1)
	"Operating instructions" (1)

Available Accessories

BP-U60/BP-U90
Rechargeable Lithium-ion Battery Pack

BC-U1A/BC-U2A
Battery Charger/AC Adaptor

UWP-D11/UWP-D12
Wireless Microphone Package

SMAD-P3
MI Shoe Mount Adaptor
* required for cable-free operation with UWP-D11/UWP-D12

URX-P03D
UWP-D two-channel portable receiver

SMAD-P3D
MI Shoe Mount Adaptor
* required for cable-free operation with URX-P03D

ECM-680S
Wired Microphones

CBKZ-SLMP
MPEG HD Upgrade License

CBKZ-SLNW1
Network Upgrade License
*available in December 2018

HVL-LBPC
Battery Video Light

MCX-500
Multicamera Live Producer

RM-30BP
Remote Commander

Dimensions

202
251.3
277.5
290.6
419.7
190
162.4

Unit: mm (inches)