

SONY



XDCAM PXW-Z280

World's first 4K 3-chip Camcorder with 1/2-type Exmor R™ CMOS image sensors, Redefines Handheld Production Image Quality and Workflow

World-leading handheld 4K 50p/60p* performance

Capture the whole scene with PXW-Z280. An all-new 4K 3CMOS 1/2-type sensor delivers a deep depth of field with image quality, contributing to high resolution, high sensitivity of F12 (59.94p), and wide dynamic range. 4K 4:2:2 10-bit adds vivid imagery and delicate color gradation.

*59.94p

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-Z280 is ready with Hybrid Log-Gamma (HLG) recording, which allows you to easy file-based workflows, whilst achieving the image quality of HDR in addition to S-Log3. 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.

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-Z280 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.

17x professional zoom lens with three independent rings with end-stop and sensor cropping extender

The PXW-Z280 is equipped with a 17x professional zoom lens able to zoom from 30.3mm to 515mm (35mm equivalent). The 1/2-inch type lens has three independent control rings with end-stop, 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 34x times zoom equivalent image is captured with sensor cropping extender.

Face Detection Autofocus(AF)

This feature is important especially in more demanding 4K shooting applications, such as recording interviews or lectures, helping a specific person subjects automatically stay in pin-sharp focus.



Face Detection AF

Revolutionary networking capabilities

Based on the technology developed for Sony's cloud-based ENG service, "XDCAM air," the new camcorder uses Sony's Quality of Service (QoS) for live distribution of high-quality broadcast content using a Dual Link connection multiplexing two cellular networks, assigning Planning Metadata and browsing and getting clips in the recording media on camcorders from a distant broadcast station via the cloud. In addition, an integrated Wi-Fi module and Ethernet connector enable hybrid Wireless/Wired data transfer, remote control and monitoring from devices such as a smartphone, tablet or PC, giving users more flexibility in production.

The complete package for professional

Unpack and shoot from day one. Advanced XAVC-Long and XAVC Intra for 4K QFHD and HD, plus MPEG HD422, MPEG HD and DVCAM to support any workflow SxS card and SD card with optional adapter can be used as recording media, giving flexible choice for users. Four-channel audio recording with independent volume dials enables precise control of external input audio and an attached MI shoe microphone. 12G-SDI enables 4K 50p / 60p transfer between long distance using only one BNC cable and dual MI shoes provide cable-less connection with Sony's UWP-D series wireless microphone receiver and use of a video light at the same time.



Exmor R™

3CMOS

XAVC

MPEG HD422

DVCAM

SxS



Dual MI Shoe
*HVL-LBPC and URX-
P030 are optional



Specifications

General	
Mass	Approx. 2.6 kg (body) Approx. 5 lb 11.7 oz (body) Approx. 3.0 kg (with lens hood, eyecup, BP-U30 battery, a SxS memory card) Approx. 6 lb 9.8 oz (with lens hood, eyecup, BP-U30 battery, a SxS memory card)
Dimensions (W x H x D)	178.4 x 202.0 x 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: 12V Battery: 14.4 V
Power Consumption	Approx. 24W (while recording with LCD Off, EVF On when the external device connector is not used.) Approx. 36W (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, 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-I QFHD mode: MPEG-4 AVC/H.264, CBG, Max. 222 Mbps XAVC-I HD mode: MPEG-4 AVC/H.264, CBG, Max. 222 Mbps 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 MPEG HD422 mode: CBR, maximum bit rate 50Mbps, MPEG-2 422P@HL MPEG HD420 HQ mode: VBR, maximum bit rate 35Mbps, MPEG-2 MP@HL DVCAM mode: CBR, 25Mbps, DVCAM
Recording Format (Audio)	XAVC-I mode: LPCM 24-bit, 48kHz, 4 channels XAVC-L mode: LPCM 24-bit, 48kHz, 4 channels MPEG HD422 mode: LPCM 24-bit, 48kHz, 4 channels MPEG HD420 HQ mode: LPCM 16-bit, 48kHz, 4 channels DVCAM mode: LPCM 16-bit, 48kHz, 4 channels
Recording Frame Rate	XAVC-I QFHD mode: 3840x2160/59.94p, 50p, 29.97p, 23.98p, 25p XAVC-I HD mode: 1920x1080/59.94p, 50p, 29.97p, 23.98p, 25p 1280x720/59.94p, 50p XAVC-L QFHD 150 mode: 3840x2160/59.94p, 50p, 29.97p, 23.98p, 25p XAVC-L HD 50 mode: 1920x1080/59.94p, 50p, 29.97p, 23.98p, 25p 1280x720/59.94p, 50p XAVC-L HD 35 mode: 1920x1080/59.94p, 50p, 29.97p, 23.98p, 25p XAVC-L HD 25 mode: 1920x1080/59.94p, 50p MPEG HD422 mode: 1920x1080/59.94p, 50p, 29.97p, 23.98p, 25p 1280x720/59.94p, 50p, 29.97p, 23.98p, 25p 1440x1080/59.94p, 50p 1280x720/59.94p, 50p DVCAM mode: 720x480/59.94p, 29.97p, 23.98p, 25p 720x576/50i, 25p
Recording/Playback Time	XAVC-I QFHD mode When using SBP-128B(128GB): Approx. 22 minutes XAVC-I HD mode When using SBP-128B(128GB): Approx. 57 minutes XAVC-L QFHD 150 mode When using SBP-128B(128GB): Approx. 86 minutes XAVC-L HD 50 mode When using SBP-128B(128GB): Approx. 230 minutes XAVC-L HD 35 mode When using SBP-128B(128GB): Approx. 310 minutes XAVC-L 25 mode When using SBP-128B(128GB): Approx. 420 minutes MPEG HD422 mode When using SBP-128B(128GB): Approx. 215 minutes MPEG HD420 HQ mode When using SBP-128B(128GB): Approx. 330 minutes When using SBP-128B(128GB): 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 1920x1080, 9Mbps 1280x720, 9Mbps 1280x720, 6Mbps 640x360, 3Mbps 480x270, 1Mbps 480x270, 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	M77 mm, pitch 0.75mm

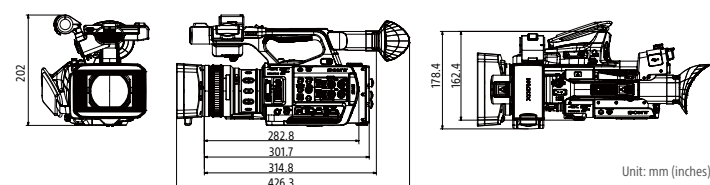
Camera Section	
Imaging Device (Type)	1/2 type back-illuminated Exmor R 3CMOS sensor
Effective Picture Elements	3840 (H) x 2160 (V)
Optical System	F1.6 prism system
Built-in Optical Filters	ND filters: CLEAR: OFF 1: 1/4ND 2: 1/16ND 3: 1/64ND Linear variable ND (Approx. 1/4ND to 1/128ND)
Sensitivity (2000 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 1080/59.94p mode, F1.9, +42 dB gain, High Sensitivity Mode, with 64 frame accumulation.) 63 dB (V) (typical)
S/N Ratio	2,000 TV lines or more (3840 x 2160p mode)
Horizontal Resolution	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 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 (Turbo Gain ON), AGC
Gamma Curve	Selectable
Input/Output	
Audio Input	XLR-type 3-pin (female) (x2), line/mic +48 V selectable LINE: +4, 0, -3dBu/10kΩ MIC: -80dBu to -30dBu /3kΩ (0 dBu=0.775 Vrms)
Video Output	BNC (x1), HD-VI/HD-SYNC/Composite 1.0Vp-p, 75Ω (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, 3.3kΩ
Timecode Output	BNC (x1) (switchable to TC in) 1.0Vp-p, 75Ω
Genlock Input	BNC (x1) (switchable to Video out) 1.0 Vp-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 (x1)
Remote	Stereo mini-minijack (Ø2.5 mm)
HDMI Output	Type A (x1)
Wired LAN	RJ-45 (x1), 1000BASE-T, 100BASE-T, 10BASE-T
Monitoring	
Viewfinder	1.3 cm (0.5 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	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*
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), Pre-installed to the Camcorder Battery pack BP-U30 (1) Battery charger BC-UT1A (1) Power Code (1) USB cable (1) Shoulder strap (1) Warranty Booklet (1) *Before Using this Unit* (1) CDROM "Operating instructions" (1)

*Depending on country/regional regulation

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-VG1 Wired Microphones
 HVL-LBPC Battery Video Light	 SBP-256E/SBP-128E SxS PRO + Memory Cards	 SBS-128G1C/SBS-64G1C SxS-1 Memory Cards	 MEAD-SDO2 SD Card Adaptor for XDCAM Series	 MCX-500 Multicamera Live Producer	 RM-30BP Remote Commander	

Dimensions



©2018 Sony Corporation. All rights reserved.
 Reproduction in whole or in part without written permission is prohibited.
 Features, design, and specifications are subject to change without notice.
 The values for mass and dimension are approximate.
 Some images in this brochure are simulated.
 "SONY" is a registered trademark of Sony Corporation.
 "Memory Stick" and "Exmor" are trademarks of Sony Corporation.
 All other trademarks are the property of their respective owners.
 Please visit Sony's professional website or contact your Sony representative for specific models available in your region.
 Distributed by