SONY

XDCAM
PXW-Z280

World's first* 4K 3-chip camcorder with 1/2-type Exmor R® 3CMOS image sensors and best-in-class features embodies the pinnacle of handheld acquisition

4K 60p** performance

An all-new 4K 3CMOS 1/2-type sensor provides a deep depth of field and class-leading performance, placing the pinnacle of 4K HDR performance in your hands. Face Detection AF keeps your subject in focus, and HLG and S-Log3 provide stunning HDR to suit any workflow.
**59.94p

Instant HDR workflow

The PXW-Z280 is ready for the switch to HDR. Instant HDR Workflow is all about speed and simplicity. Shoot, edit and view HDR content in Hybrid Log-Gamma (HLG) without the need for additional color grading, freeing you to deliver content quickly without compromising on imaging expression and quality of content. S-Log3 is the proven choice for premium applications where you wish to capture as much data as possible for the ultimate flexibility in 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 or shutter speed.

17x professional zoom lens with three independent rings

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 zoom equivalent image is captured with sensor cropping extender.

Revolutionary networking capabilities

Deliver your content faster wherever you are. PXW-Z280 is the world's first* camcorder with built-in Dual Link Cellular connection for double the uplink performance and reliability.

Stream high quality video utilizing Sony's Quality of Service (QoS) to an optional PWS-110RX1A receiver via a single link cellular, WiFi, or hardwired connection. An optional subscription to Sony's XDCAM air cloud-based ENG service supports dual link connectivity, which balances and aggregates Sony's QoS stream among 2 cellular connections. XDCAM air connectivity also supports file based workflows with enhanced metadata and camera control capabilities. In addition, the camera's built in WiFi® module and Ethernet connector enable hybrid wire-less/wired data transfer, and remote control & monitoring from Android and iOS devices, providing additional flexibility in the field.

Amazingly fast precision auto focus

With Sony's newly developed Face Detection Auto Focus, you can choose between Face Priority AF and Face Only AF. Simply keep the person in frame, and no matter how you move to obtain a better angle, you can be confident the PXW-Z280 will keep your subject in pin-sharp focus.

Face Detection AF

The complete package for professionals

Unpack and shoot from day one with advanced XAVC™-Intra and XAVC-Long for 4K QFHD and HD, plus MPEG HD422™, MPEG HD and DVCAM® to support any workflow. SxS® card and SD card with optional adapter provide recording media flexibility. Four-channel audio recording with independent volume dials allow precise control of external input audio.12G-SDI enables 4K 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. Familiar Sony control layout and operation minimize training requirements.

Dual MI Shoe
HVL-LBPC and URX-P03D are optional

*Based on Sony's research as of August 2018.

Specifications

General

Weight	Approx. 5 lb 11.7 oz (body)
	Approx 2.6 kg (body)
	Approx. 6 lb 9.8 oz (with lens hood, eyecup, BP-U30 battery, a SxS memory card)
	3.0 kg (with lens hood, eyecup, BP-U30 battery, a SxS memory card)
Dimensions (W x H x D)	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)
	178.4 × 202.0 × 426.3 mm (With the accessories (lens hood, eyecup), excluding the grip belt and including the projecting parts)
Power Requirements	DC In: 12V Approx.
	Battery: 14.4 V
Power Consumption	Approx. 24W(while recording with LCD Off, EVF On when the external device connector is not used.)
	Approx. 31W(while recording with LCD On, EVF On when the external device connector is used.)
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
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.600 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, 59.94i, 50p, 50i, 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, 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
	MPEG HD422 mode: 1920x1080/59.94i, 50i, 29.97P, 23.98P, 25P 1280x720/59.94P, 50P, 29.97P, 23.98P, 25P
	MPEG HD420 HQ mode:1920x1080/59.94i, 50i, 29.97P, 23.98P, 25P 1440x1080/59.94i, 50i, 29.97P, 23.98P, 25P 1280x720/59.94P,50P
	DVCAM mode:720x480/59.94i, 29.97PsF 720x576/50i, 25PsF
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

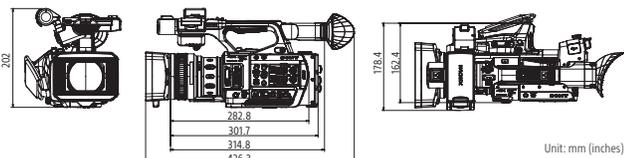|	
Lens Mount	Fixed
Zoom Ratio	17x (optical), servo/manual
Focal Length	f = 5.6 - 95.2 mm (35mm equivalent: 30.3 - 515 mm)
Iris	F1.9 - F16 and close
	auto/manual selectable
Focus	800 mm to ∞ (Macro Off)
	50 mm to ∞ (Macro On, Wide)
	800 mm to ∞ (Macro On, Tele)
	AF/MF/Full MF selectable
Image Stabilizer	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 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 Rezolution	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 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, 18 dB, 42dB(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)
Video Output	BNC (x1), HD-Y/ 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 (Φ2.5 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 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)
	Shoulder strap (1)
	Warranty Booklet (1)
	"Before Using this Unit" (1)
	"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-680S
Wired Microphones

HVL-LBPC
Battery Video Light

SBP-256E/SBP-128E
SxS PRO + Memory Cards

SBS-128G1C/SBS-64G1C
SxS-1 Memory Cards

MEAD-SD02
SD Card Adaptor for XDCAM Series

MCX-500
Multicamera Live Producer

RM-30BP
Remote Commander

Dimensions

282.8
301.7
314.8
426.3

202

178.4
162.4

Unit: mm (inches)

Sony Electronics Inc.
115 West Century Road
Suite 250
Paramus, NJ 07652
sony.com/xdcam

V-2667 (MK20256V1)   Issued in USA (9/18)