

### **Clifton Cameras Product Specification**

#### Sony a9 III Digital Camera

Specifications	
General	
Camera type:	Interchangeable lens digital camera
Lens mount:	E-mount
Camera section	
Image sensor –	
Туре:	35mm full frame (35.6 x 23.8 mm), Exmor RS CMOS sensor
Number Of Pixels (Effective):	Still images: Approx. 24.6 megapixels max.
Number Of Pixels (Effective):	Movies: Approx. 20.3 megapixels max.
Number of Pixels (total):	Approx. 25.2 megapixels
Optical low pass filter:	Yes
Color temperature range:	2500 K - 9900 K
Anti-Dust System:	Yes
Recording system (still image)	-
Recording Format: (MPEG-A MIAF compliant), RAW (Song	JPEG (DCF Ver. 2.0, Exif Ver. 2.32, MPF Baseline compliant), HEIF y ARW 5.0 format compliant)
Image Size (pixels) [3:2]: 2000 (6.0 M)	35mm full frame L: 6000 x 4000 (24 M), M: 3936 x 2632 (10 M), S: 3008 x
Image Quality Modes:	RAW
Quality Modes:	JPEG
Image Quality Modes:	HEIF (4:2:0 / 4:2:2)
Image Quality Modes:	RAW & JPEG
Image Quality Modes:	RAW & HEIF
14bit RAW Output:	Yes
Recording system (movie) -	
Video Compression:	XAVC S: MPEG-4 AVC/H.264



Video Compression:	XAVC HS: MPEG-H HEVC/H.265
Audio Recording Format: 24 bit)*2	LPCM 2ch (48 kHz 16 bit), LPCM 2ch (48 kHz 24 bit)*2 , LPCM 4ch (48 kHz
Movie recording format (XAVC HS 4	К):
3840 x 2160 (4:2:0, 10bit) (Approx.)	119.88p (200 Mbps)
	100p (200 Mbps)
	59.94p (150 Mbps / 75 Mbps / 45 Mbps)
	50p (150 Mbps / 75 Mbps / 45 Mbps)
	23.98p (100 Mbps / 50 Mbps / 30 Mbps)
3840 x 2160 (4:2:2, 10bit) (Approx.)	119.88p (280 Mbps)
	100p (280 Mbps)
	59.94p (200 Mbps / 100 Mbps)
	50p (200 Mbps / 100 Mbps)
	23.98p (100 Mbps / 50 Mbps)
Movie recording format (XAVC S 4K):	
3840 x 2160 (4:2:0, 8bit) (Approx.)	119.88p (200 Mbps)
	100p (200 Mbps)
	59.94p (150 Mbps)
	50p (150 Mbps)
	29.97p (100 Mbps / 60 Mbps)
	25p (100 Mbps / 60 Mbps)
	23.98p (100 Mbps / 60 Mbps)
3840 x 2160 (4:2:2, 10bit) (Approx.)	119.88p (280 Mbps)
	100p (280 Mbps)
	59.94p (200 Mbps)
	50p (200 Mbps)
	29.97p (140 Mbps)
	25p (140 Mbps)
	23.98p (100 Mbps)

Movie recording format (XAVC S HD):



1920 x 1080 (4:2:0, 8bit) (Approx.)	119.88p (100 Mbps / 60 Mbps)	
	100p (100 Mbps / 60 Mbps)	
	59.94p (50 Mbps / 25 Mbps)	
	50p (50 Mbps / 25 Mbps)	
	29.97p (50 Mbps / 16 Mbps)	
	25p (50 Mbps / 16 Mbps)	
	23.98p (50 Mbps)	
1920 x 1080 (4:2:2, 10bit) (Approx.)	59.94p (50 Mbps)	
	50p (50 Mbps)	
	29.97p (50 Mbps)	
	25p (50 Mbps)	
	23.98p (50 Mbps)	
Movie recording format (XAVC S-I 4K):		
3840 x 2160 (4:2:2, 10bit) (Approx.)	59.94p (600 Mbps)	
	50p (500 Mbps)	
	29.97p (300 Mbps)	
	25p (250 Mbps)	

23.98p (240 Mbps)

#### Movie recording format (XAVC S-I HD):

1920 x 1	080 (4:2:2, 10bit) (Approx.)	59.94p (222 Mbps)
		50p (185 Mbps)
		29.97p (111 Mbps)
		25p (93 Mbps)
		23.98p (89 Mbps)
Movie fu	nction	
Slow & C	Quick Motion (S&Q):	Yes
Proxy rec	cording:	Yes
TC/UB	Recording (movie):	Yes
RAW Ou	tput:	Yes (HDMI)



#### Focus system

Туре:	Fast Hybrid AF (phase-detection AF / contrast-detection AF)
Focus Point:	Still images: Max. 759 points (phase-detection AF)
	Movies: Max. 759 points (phase-detection AF)
Focus Sensitivity Range:	EV-5 to EV20 (ISO100 equivalent with F2.0 lens attached in AF-S)
Recognition target (Still images):	Human; Animal; Bird; Insect; Car; Train; Airplane
Recognition target (Movies):	Human; Animal; Bird; Insect; Car; Train; Airplane
Other Features:	AF Level for Crossing (Still)
	AF Track for Speed Change (Still)
	AF Subj. Shift Sensitivity (Movie)
	AF Transition Speed (Movie)
	Switch V/H AF Area
	AF Area Regist.
	Circ. of Focus Point
	Focus Map (Movie)
	AF Assist (Movie)
AF Illuminator:	Yes (with Built-in LED type)
Exposure Control	
Metering Type:	1200-zone evaluative metering
Metering Sensitivity:	EV-3 to EV20 (ISO100 equivalent with F2.0 lens attached)
Exposure Compensation:	+/- 5.0 EV (1/3 EV, 1/2 EV steps selectable)
ISO sensitivity (Recommended Index): Still images: ISO 250 - 25600 (expandable to ISO 125 - 51200), AUTO (ISO 250 - 12800, selectable lower limit and upper limit)	
lower limit and upper limit)	Movies: ISO 250 - 25600 equivalent, AUTO (ISO 250 - 12800, selectable
Anti-flicker Shoot:	Yes
Viewfinder	
Туре: 1.6 ст (0	0.64 type) electronic viewfinder (Quad-XGA OLED)
Number of Dots:	9 437 184 dots
Magnification:	Approx. 0.90x (with 50 mm lens at infinity, -1 m <sup>-1</sup> )



Dioptre Adjustment:	-4.0 to +3.0 m <sup>-1</sup>
Eye Point: 1 m <sup>-1</sup> (CIPA standard)	Approx. 25 mm from the eyepiece lens, 21 mm from the eyepiece frame at -
Finder Frame Rate Selection: 50fps / HI 100fps / HIGHER 200fps	NTSC mode: STD 60fps / HI 120fps / HIGHER 240fps, PAL mode: STD
LCD screen	
Туре:	8.0 cm (3.2-type) type TFT
Touch Panel:	Yes
Number of Dots:	2 095 104 dots
Adjustable Angle:	Opening Angles (approx.): Up 98 °, down 40 °, side 180 °, rotation 270 °
Other features: lapse; Auto Framing; Pre-Capture; Cont	Soft Skin Effect; Creative Look; Custom function; Picture Profile; Time- tinuous Shooting Speed Boost; NR Shooting
Clear Image Zoom:	Approx. 2x
	Approx. 1.5x (4K), Approx. 2x (HD)
Shutter	
Shutter type:	Electronic shutter
Shutter Speed:	Still images: 1/80000 to 30 s, Bulb
	Movies: 1/8000 to 1 s
Flash Sync. Speed:	1/80000 s*4 , 1/500 s
Image Stabilization	
Type: depends on lens specifications)	Image sensor-shift mechanism with 5-axis compensation (compensation
Compensation Effect: F1.2 GM lens mounted. Long exposure	$8.0\ {\rm stops}$ (based on CIPA standard. Pitch/yaw shake only. With FE 50mm NR off.)
Mode:	Still images: On / Off
	Movie: Dynamic active / Active / Standard / Off
Flash	
Туре:	-
Control:	Pre-flash TTL
Flash Compensation:	+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)
External Flash Compatibility:	Sony $\alpha$ System Flash compatible with Multi Interface Shoe, attach the shoe

 $\label{eq:sternal} \mbox{External Flash Compatibility:} Sony $\alpha$ System Flash compatible with Multi Interface Shoe, attach the shoe adaptor for flash compatible with Auto-lock accessory shoe \end{tabular}$ 



# cliftoncameras

Continuous drive speed (approx., max.)*5:	Hi+: 120 fps
No. of recordable frames (approx.):	JPEG Extra fine L: 192 frames
	JPEG Fine L: 192 frames
	JPEG Standard L: 192 frames
	RAW: 192 frames
	RAW & JPG: 192 frames
	RAW (Uncompressed): 96 frames
	RAW (Uncompressed) & JPG: 96 frames
	RAW (Lossless Compressed): 96 frames
	RAW (Lossless Compressed) & JPEG: 96 frames
Pixel Shift Multi Shooting:	-
Playback	
Modes: Divider Frame; Crop; Photo Capture	Enlarged display mode; Protect; Rating; Shot Mark (Movie);
Accessibility	
Functions: Display; Subject Recognition in AF; Touch Focu screen; Custom function; Enlarge Menu Screen	Screen Reader; Focus Magnifier; Focus Map (Movie); Peaking s; Touch Tracking; Touch Shutter; Touch AE; Multi-angle LCD
Interface	
PC Interface:	Mass-storage / MTP
Multi / Micro USB terminal*6:	Yes
USB Type-C® Terminal:	Yes (SuperSpeed USB 10 Gbps (USB 3.2) compatible)
NFC™:	-
Sync Terminal:	Yes
Wireless LAN (Built-In): GHz band))*7 *8	Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac (2.4 GHz band/5
Bluetooth:	Yes (Bluetooth Standard Ver. 5.0 (2.4 GHz band))
HD Output:	HDMI connector (Type-A)
(59.94p 8bit	3840 x 2160 (59.94p / 50p / 29.97p / 25p / 23.98p) / 1920 x 1080 o / 50p / 23.98p) / 1920 x 1080 (59.94i / 50i), YCbCr 4:2:2 10bit / RGB
	4672x2628 (59.94p / 29.97p / 23.98p) , Raw 16bit
	4012A2020 (00.04p / 20.01p / 20.00p) ; Naw Tobic



Mic Terminal:	Yes (3.5 mm Stereo minijack)
Headphone Terminal:	Yes (3.5 mm Stereo minijack)
Remote Control (Wireless):	Yes (Bluetooth remote control)
LAN terminal:	Yes (1000BASE-T, 100BASE-TX, 10BASE-T)
Functions:	FTP Transfer Func.(Wired LAN, USB Tethering, Wi-Fi)
	Send to smartphone
	Remote control via smartphone
	PC Remote
USB Streaming	
Video data format:	MJPEG
	YUV420*10
	3840 x 2160 (15p / 30p)
	3840 x 2160 (12.5p / 25p)
	1920 x 1080 (30p / 60p)
	1920 x 1080 (25p / 50p)
	1280 x 720 (30p)
	1280 x 720 (25p)
	LPCM 2ch (16bit 48 kHz)
Audio	
Microphone:	Built-in, stereo
	Built-in, voice memo
Speaker:	Built-in, monaural
Lens Compensation	
Setting:	Shading, Chromatic Aberration, Distortion, Breathing (Movie)
Power	
Supplied Battery:	One rechargeable battery pack NP-FZ100
Battery Life (Still Images)*11: (CIPA standard)	Approx. 410 shots (Viewfinder) / Approx. 520 shots (LCD monitor)
Battery Life (Movie, actual recording)*12: (CIPA standard)	Approx. 90 min (Viewfinder) / Approx. 95 min (LCD monitor)



## cliftoncameras

Battery Life (Movie, continuous recording): (CIPA standard)	Approx. 145 min (Viewfinder) / Approx. 150 min (LCD monitor)
Internal Battery Charge: compatible)	Yes (Available with USB Type-C Terminal. USB Power Delivery
USB Power supply: compatible)	Yes (Available with USB Type-C Terminal. USB Power Delivery
Power consumption with Viewfinder: attached)	Still images: Approx. 4.8 W (with FE 28-70mm F3.5-5.6 OSS lens
attached	Movies: Approx. 6.8 W (with FE 28-70mm F3.5-5.6 OSS lens
Power consumption with LCD screen: attached)	Still images: Approx. 3.8 W (with FE 28-70mm F3.5-5.6 OSS lens
attached)	Movies: Approx. 6.6 W (with FE 28-70mm F3.5-5.6 OSS lens
Weight (with battery and memory card included):	Approx. 703 g / Approx. 1 lb 8.8 oz
Weight - Body only:	Approx. 618 g / Approx. 1 lb 5.8 oz
Dimensions	
Dimensions (W x H x D): (FROM GRIP TO MONITOR)	Approx. 136.1 x 96.9 x 82.9 mm, Approx. 136.1 x 96.9 x 72.8 mm
inches (F	Approx. 5 3/8 x 3 7/8 x 3 3/8 inches, Approx. 5 3/8 x 3 7/8 x 2 7/8 ROM GRIP TO MONITOR)
Operating Temperature:	0 - 40 °C / 32 - 104 °F
Supplied Accessory:	Rechargeable Battery NP-FZ100
	Battery Charger BC-QZ1
	Power cord
	Cable Protector
	Shoulder strap
	Body cap
	Accessory shoe cap
	Eyepiece cup

\*1 Number of effective pixels varies depending on attached lenses and camera settings.

\*2 When using accessories that support 4ch output / 24 bits with the Multi Interface Shoe.

\*3 With compatible Sony external flash



\*4 With compatible external flash

\*5 Varies according to shooting conditions or memory card used

\*6 Supports Micro USB compatible device.

\*7 (Configuration method/Access method) WPS or manually /infrastructure mode. When connecting to smartphones, the camera can always work as a base without a wireless access point. (Security: WEP/WPA-PSK/WPA2-PSK)

\*8 Models sold in some countries/regions support IEEE 802.11b/g/n (2.4GHz) wireless LAN only.

\*9 Sony accessories for the Accessory Shoe can be attached.

\*10 When [Resolution] is set to [HD(720p)], [MJPEG] is only available.

\*11 The LCD screen is turned on, shot once every 30 seconds, operate zoom alternately between W and T ends, flash strobe once every two times, turn power off and on once every ten times.

\*12 Indication recording time, which is defined by repeating the cycle: Power on, start recording, zoom , stand-by and power off.