

Clifton Cameras Product Specification

Lens	Lens Mount	E-mount
Image sensor	Type	35 mm full frame (35.9 x 23.9 mm), Exmor R CMOS sensor
Image sensor	Number Of Pixels (Effective)	Approx. 33.0 megapixels
Image sensor	Number of Pixels (total)	Approx. 34.1 megapixels
Image sensor	Aspect Ratio	3:2
		R, G, B primary color
Image sensor	Anti-Dust System	Yes (Charge protection coating on optical filter and image sensor shift mechanism)
Recording (still images)	Recording Format	JPEG (DCF Ver. 2.0, Exif Ver. 2.32, MPF Baseline compliant), HEIF (MPEG-A MIAF compliant), RAW (Sony ARW 4.0 format compliant)
Recording (still images)	Image Size (pixels) [3:2]	35 mm full frame L: 7008 x 4672 (33 M), M: 4608 x 3072 (14 M), S: 3504 x 2336 (8.2 M), APS-C M: 4608 x 3072 (14 M), S: 3504 x 2336 (8.2 M)
		35 mm full frame L: 6224 x 4672 (29 M), M: 4096 x 3072 (13 M), S: 3120 x 2336 (7.3 M), APS-C M: 4096 x 3072 (13 M), S: 3120 x 2336 (7.3 M)
Recording (still images)	Image Size (pixels) [16:9]	35 mm full frame L: 7008 x 3944 (28 M), M: 4608 x 2592 (12 M), S: 3504 x 1968 (6.9 M), APS-C M: 4608 x 2592 (12 M), S: 3504 x 1968 (6.9 M)
		35 mm full frame L: 4672 x 4672 (22 M), M: 3072 x 3072 (9.4 M), S: 2336 x 2336 (5.5 M), APS-C M: 3072 x 3072 (9.4 M), S: 2336 x 2336 (5.5 M)
Recording (still images)	Image Size (pixels) [Sweep Panorama]	-
Recording (still images)	Image Quality Modes	RAW (Compressed / Lossless Compressed / Uncompressed)
Recording (still images)	Image Quality Modes	JPEG (Extra fine / Fine / Standard / Light)
Recording (still images)	Image Quality Modes	HEIF (4:2:0 / 4:2:2) (Extra fine / Fine / Standard / Light)
Recording (still images)	Image Quality Modes	RAW & JPEG
Recording (still images)	Image Quality Modes	RAW & HEIF

Recording (still images)	RAW Output	Yes
Recording (still images)	Picture Effect	-
Recording (still images)	Creative Style	-
		ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)
Recording (still images)	Picture Profile	Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 [800%], S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset
		Yes
Recording (still images)	Dynamic Range Functions	Off, Dynamic Range Optimizer
Recording (still images)	Colour Space	sRGB standard (with sYCC gamut), Adobe RGB standard and Rec. ITU-R BT.2100 standard (BT.2020 gamut).*1
Recording (movie)	Recording Format	XAVC S
Recording (movie)	Recording Format	XAVC HS
Recording (movie)	Video Compression	XAVC S: MPEG-4 AVC/H.264
Recording (movie)	Video Compression	XAVC HS: MPEG-H HEVC/H.265
Recording (movie)	Audio Recording Format	LPCM 2 ch(48 kHz 16 bit), LPCM 2 ch(48 kHz 24 bit)*2, LPCM 4 ch(48 kHz 24 bit)*2, MPEG-4 AAC-LC 2 ch*3
Recording (movie)	Picture Effect	-
Recording (movie)	Creative Style	-
		ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)
Recording (movie)	Picture Profile	Yes (Off / PP1-PP11) Parameters: Black level, Gamma (Movie, Still, S-Cinetone, Cine1-4, ITU709, ITU709 [800%], S-Log2, S-Log3, HLG, HLG1-3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset
		Yes
Recording (movie)	Colour Space	Rec. ITU-R BT.2100 standard compatible (BT.2020 gamut)*4
		-

		-
		60p (150 Mbps / 75 Mbps / 45 Mbps)*5 *6
		50p (150 Mbps / 75 Mbps / 45 Mbps)*5
		60p (200 Mbps / 100 Mbps)*5 *6
		50p (200 Mbps / 100 Mbps)*5
		24p (100 Mbps / 50 Mbps / 30 Mbps)*6
		24p (100 Mbps / 50 Mbps)*6
		60p (150 Mbps)*5 *6
		30p (100 Mbps / 60 Mbps)*6
		24p (100 Mbps / 60 Mbps)*6
		50p (150 Mbps)*5
		25p (100 Mbps / 60 Mbps)
		60p (200 Mbps)*5 *6
		30p (140 Mbps)*6
		24p (100 Mbps)*6
		50p (200 Mbps)*5
		25p (140 Mbps)
		120p (100 Mbps / 60 Mbps)*7 *6
		100p (100 Mbps / 60 Mbps)
		60p (50 Mbps)*6
		50p (50 Mbps)
		60p (50 Mbps / 25 Mbps)*6
		50p (50 Mbps / 25 Mbps)
		30p (50 Mbps)*6
		25p (50 Mbps)
		30p (50 Mbps / 16 Mbps)*6
		25p (50 Mbps / 16 Mbps)
		24p (50 Mbps)*6
		24p (50 Mbps)*6

		60p (600 Mbps)*5 *6
		50p (500 Mbps)*5
		30p (300 Mbps)*6
		25p (250 Mbps)
		24p (240 Mbps)*6
		60p (222 Mbps)*6
		50p (185 Mbps)
		30p (111 Mbps)*6
		25p (93 Mbps)
		24p (89 Mbps)*6
Recording (movie)	Image frame rate	NTSC mode: 1fps,2fps,4fps,8fps,15fps,30fps,60fps,120fps*7 *8 PAL mode: 1fps,2fps,3fps,6fps,12fps,25fps,50fps,100fps*7 *8
Recording (movie)	Movie Functions	Yes
Recording (movie)	Movie Functions	Yes
Recording (movie)	Movie Functions	Yes
		Yes (1280 x 720 (Approx. 6 Mbps), 1920 x 1080(Approx. 9 Mbps), 1920 x 1080(Approx. 16 Mbps))
Recording (movie)	Movie Functions	Yes
Recording (movie)	Movie Functions	Yes
Recording (movie)	Movie Functions	Yes
		-
Recording system	Location information Link from smartphone	Yes
Recording system	Media	SD memory card
Recording system	Media	SDHC memory card (UHS-I/II compliant)
Recording system	Media	SDXC memory card (UHS-I/II compliant)
Recording system	Media	CFexpress Type A memory card
Recording System	Memory Card Slot	SLOT1: Multi slot for SD (UHS-I/II compliant) memory card / CFexpress Type A card, SLOT2: Slot for SD (UHS-I/II compliant) memory card

		Simult. Rec, Sort, Auto Switch Media, Copy
		FAT12, 16, 32, exFAT
Noise reduction	Noise Reduction	Long exposure NR: On/Off, available at shutter speeds longer than 1 s
Noise reduction	Noise Reduction	High ISO NR: Normal / Low / Off
White Balance	White Balance Modes	Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent / Flash / Underwater / Color Temperature (2500 to 9900 K) & color filter / Custom
		Yes (Shut. Halfway Down / Cont. Shooting / Off)
		Fast Hybrid AF (phase-detection AF / contrast-detection AF)
Focus	Focus Sensor	Exmor R CMOS sensor
Focus	Focus Point	35 mm full frame: 759 points (phase-detection AF), APS-C mode with FF lens: 713 points (phase-detection AF), with APS-C lens: 575 points (phase-detection AF) / 425 points (contrast-detection AF)
Focus	Focus Sensitivity Range	EV-4 to EV20 (ISO100 equivalent with F2.0 lens attached)
Focus	Focus Mode	AF-A (Automatic AF), AF-S (Single-shot AF), AF-C (Continuous AF), DMF (Direct Manual Focus), Manual Focus
Focus	Focus Area	Wide / Zone / Center Fix / Spot / Expand Spot / Tracking
Focus	Other Features	-
		[Still images] Human (Right/Left Eye Select) / Animal (Right/Left Eye Select) / Bird, [Movie] Human (Right/Left Eye Select) / Animal (Right/Left Eye Select) / Bird
Focus	Other Features	Predictive control
Focus	Other Features	Focus lock
Focus	Other Features	AF Track Sens. (Still)
Focus	Other Features	AF Subj. Shift Sensitivity (Movie)
Focus	Other Features	AF Transition Speed (Movie)
Focus	Other Features	Switch V/H AF Area
Focus	Other Features	AF Area Regist.

Focus	Other Features	Circ. of Focus Point
Focus	Other Features	Focus Map (Movie)
Focus	Other Features	AF Assist (Movie)
Focus	AF Illuminator	Yes (with Built-in LED type)
Focus	AF Illuminator range	Approx. 0.3 m - approx. 3.0 m (with FE 28-70 mm F3.5-5.6 OSS lens attached)
Focus	Other Features	-
Exposure	Metering Type	1200-zone evaluative metering
Exposure	Metering Sensor	Exmor R CMOS sensor
Exposure	Metering Sensitivity	EV-3 to EV20 (at ISO100 equivalent with F2.0 lens attached)
Exposure	Metering Mode	Multi-segment
Exposure	Metering Mode	Center-weighted
Exposure	Metering Mode	Spot (Standard / Large)
Exposure	Metering Mode	Entire Screen Avg.
Exposure	Metering Mode	Highlight
Exposure	Exposure Modes	[Still images] Intelligent Auto (Auto) / Program Auto (P) / Aperture Priority (A) / Shutter Priority (S) / Manual Exposure (M)
Exposure	Exposure Modes	[Movie] Intelligent Auto (Auto) / Program Auto (P) / Aperture Priority (A) / Shutter Priority (S) / Manual Exposure (M) / Flexible Exp. Mode
Exposure	Exposure Modes	[Slow & Quick Motion] Intelligent Auto (Auto) / Program Auto (P) / Aperture Priority (A) / Shutter Priority (S) / Manual Exposure (M) / Flexible Exp. Mode
Exposure	Scene Selection	-
Exposure	Exposure Compensation	+/- 5.0 EV (1/3 EV, 1/2 EV steps selectable)
Exposure	Exposure Bracketing	Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. (Ambient light, Flash light)
Exposure	AE Lock	Locked when shutter button is pressed halfway. Available with AE lock button. (On/Off/Auto)

Exposure	ISO sensitivity (Recommended Exposure Index)	Still images: ISO 100-51200 (ISO numbers from ISO 50 to ISO 204800 can be set as expanded ISO range.), AUTO (ISO 100-12800, selectable lower limit and upper limit), Movies: ISO 100-51200 equivalent (ISO numbers up to ISO 102400 can be set as expanded ISO range.), AUTO (ISO 100-12800, selectable lower limit and upper limit)
Exposure	Anti-flicker Shoot.	Yes*9
Viewfinder	Viewfinder Type	1.3 cm (0.5 type) electronic viewfinder (Quad-VGA OLED)
Viewfinder	Number of Dots	3 686 400 dots
		Brightness, Color temperature
Viewfinder	Field Coverage	100%
Viewfinder	Magnification	Approx. 0.78x (with 50 mm lens at infinity, $-1\text{m}^{\sup>1\</sup>}$)
Viewfinder	Dioptr Adjustment	-4.0 to $+3.0\text{ m}^{\sup>1\</sup>}$
Viewfinder	Eye Point	Approx. 23 mm from the eyepiece lens, 18.5 mm from the eyepiece frame at $-1\text{m}^{\sup>1\</sup>}$ (CIPA standard)
		Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check, Peaking MF, Zebra, Movie marker, Emphasized display during REC
Viewfinder	Finder Frame Rate Selection	NTSC mode: STD 60fps / HI 120fps, PAL mode: STD 50fps / HI 100fps
LCD Screen	Type	7.5 cm (3.0-type) type TFT
LCD Screen	Touch Panel	Yes
LCD Screen	Number of Dots	1 036 800 dots
LCD Screen	Brightness Control	Manual (5 steps between -2 and +2), Sunny Weather mode
		Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check, Peaking MF, Zebra, Movie marker, For viewfinder, Monitor Off, Emphasized display during REC
LCD Screen	Adjustable Angle	Opening Angle: Approx. 176° ., Rotation Angle: Approx. 270° .
LCD Screen	Focus Magnifier	Yes, Focus Magnifier (35 mm full frame: 5.5x / 11.0x, APS-C: 3.6x / 7.2x)

Other Features	Face Detection	Face/Eye Priority in AF, Face Priority in Multi Metering, Regist. Faces Priority
Other Features	Others	-
		Yes
Other Features	Others	-
Other Features	Self-Portrait Self-timer	-
Other Features	Others	Yes
		Yes
Other Features	PlayMemories Camera Apps™	-
Other Features	Others	-
Other Features	Others	Yes
Other Features	Others	Yes
Other Features	Others	Yes
Other Features	Clear Image Zoom	Approx. 2x
Other Features	Clear Image Zoom	Approx. 1.5x (4K), Approx. 2x (HD)
Other Features	Digital Zoom	35 mm full frame: M: approx. 1.5x, S: approx. 2x APS-C: S: approx. 1.3x
Other Features	Digital Zoom	35 mm full frame: L: approx. 4x, M: approx. 6.1x, S: approx. 8x APS-C: M: approx. 4x, S: approx. 5.3x
Other Features	Digital Zoom	35 mm full frame: approx. 4x APS-C: approx. 4x
Shutter	Type	Electronically-controlled, vertical-traverse, focal-plane type
		Mechanical shutter / Electronic shutter
Shutter	Shutter Speed	Still images: 1/8000 to 30 s, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/50 in AUTO mode (up to 1/25 in Auto slow shutter mode)
Shutter	Flash Sync. Speed	1/250 s (35 mm full frame), 1/320 s (APS-C)
Shutter	Electronic Front Curtain Shutter	Yes (ON/OFF)

Shutter	Silent Shooting	Yes (ON/OFF)
Image Stabilization	Type	Image Sensor-Shift mechanism with 5-axis compensation (Compensation depends on lens specifications)
Image Stabilization	Compensation Effect	5.5 stops (based on CIPA standard. Pitch/yaw shake only. With Planar T* FE 50 mm F1.4 ZA lens mounted. Long exposure NR off.)
		[Still images] On / Off, [Movie] Active / Standard / Off
Flash Control	Control	Pre-flash TTL*11
Flash Control	Flash Compensation	+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)
Flash Control	Flash Modes	Flash off
Flash Control	Flash Modes	Autoflash
Flash Control	Flash Modes	Fill-flash
Flash Control	Flash Modes	Slow Sync.
Flash Control	Flash Modes	Rear Sync.
Flash Control	Flash Modes	Red-eye reduction (on/off selectable)
Flash Control	Flash Modes	Wireless*12
Flash Control	Flash Modes	Hi-speed sync.*12
Flash Control	Recycling Time	-
Flash Control	External Flash Compatibility	Sony α System Flash compatible with Multi Interface Shoe, attach the shoe adaptor for flash compatible with Auto-lock accessory shoe
Flash Control	FE Level Lock	Yes
		Yes (Light signal: Available with Fill-flash, Slow Sync., Hi-speed sync. / Radio signal: Available with Fill-flash, Rear Sync., Slow Sync., Hi-speed sync.)
Drive	Drive Modes	Single Shooting
Drive	Drive Modes	Continuous shooting (Hi+/Hi/Mid/Lo selectable)
Drive	Drive Modes	Self-timer
Drive	Drive Modes	Self-timer (Cont.)
Drive	Drive Modes	Bracket: Single
Drive	Drive Modes	Bracket: Cont.

Drive	Drive Modes	White Balance bracket
Drive	Drive Modes	DRO bracket
Drive	Self-Timer	10 s delay / 5 s delay / 2 s delay / Continuous self-time / Bracketing self-timer
		-
Drive	Continuous Drive Speed (approx. max.)	Continuous shooting: Hi+: 10 fps, Hi: 8 fps, Mid: 6 fps, Lo: 3 fps
Drive	No. of recordable frames (approx.)	JPEG Extra fine L: over 1000 frames
Drive	No. of recordable frames (approx.)	JPEG Fine L: over 1000 frames
Drive	No. of recordable frames (approx.)	JPEG Standard L: over 1000 frames
Drive	No. of recordable frames (approx.)	RAW: over 1000 frames
Drive	No. of recordable frames (approx.)	RAW & JPEG: over 1000 frames
Drive	No. of recordable frames (approx.)	RAW (Lossless Compressed): over 1000 frames
Drive	No. of recordable frames (approx.)	RAW (Lossless Compressed) & JPEG: over 1000 frames
Drive	No. of recordable frames (approx.)	RAW (Uncompressed): over 1000 frames
Drive	No. of recordable frames (approx.)	RAW (Uncompressed) & JPEG: 828 frames
Playback	Modes	Single (with or without shooting information Y RGB histogram & highlight / shadow warning)
Playback	Modes	Index view
Playback	Modes	Enlarged display mode (L: 19.5x, M: 12.8x, S: 9.7x)
Playback	Modes	Auto Review
Playback	Modes	Image orientation
Playback	Modes	Folder selection (Date / Still / Movie)
Playback	Modes	Protect
Playback	Modes	Rating
Playback	Modes	Display as Group
Playback	Modes	Shot Mark (Movie)
Playback	Modes	Divider Frame
Playback	Modes	Crop
Playback	Photo Capture	Yes

		-
Interface	PC Interface	Mass-storage / MTP
Interface	Multi / Micro USB Terminal	Yes
		Yes (SuperSpeed USB 10 Gbps (USB 3.2) compatible)
Interface	NFC™	-
Interface	Sync Terminal	-
Interface	Wireless LAN (Built-In)	Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac (2.4 GHz band/5 GHz band))*16 *15
Interface	Bluetooth	Yes (Bluetooth Standard Ver. 4.1 (2.4 GHz band))
Interface	HD Output	HDMI connector (Type-A)
Interface	HD Output	3840 x 2160 (60p / 50p / 30p / 25p / 24p) / 1920 x 1080 (60p / 50p / 24p) / 1920 x 1080 (60i / 50i), YCbCr 4:2:2 10 bit / RGB 8 bit*6
Interface	Multi Interface Shoe	Yes (with Digital Audio Interface)
Interface	Mic Terminal	Yes (3.5 mm Stereo minijack)
Interface	Headphone Terminal	Yes (3.5 mm Stereo minijack)
		-
		Yes (Bluetooth remote control)
Interface	Vertical Grip Connector	Yes
		-
		FTP Transfer Func.(Wired LAN(USB-LAN), USB Tethering, Wi-Fi)
		View on Smartphone
		Remote control via Smartphone
		PC Remote
		BRAVIA Sync (Control for HDMI)
		PhotoTV HD
		MJPEG
		3840 x 2160 (15p / 12.5p) / 1920 x 1080 (60p / 50p / 30p / 25p) / 1280 x 720 (30p / 25p)
		LPCM 2ch (16 bit 48 kHz)

		Yes
		YUV420*18
Audio	Microphone	Built-in, stereo
Audio	Speaker	Built-in, monaural
Print	Compatible Standards	Exif Print, Print Image Matching III
Custom function	Custom Function Type	Yes
		Yes
		Yes
		Yes
Custom function	Memory Function	Yes (Body 9 sets /memory card 12 sets)
Lens Compensation	Setting	Peripheral Shading, Chromatic Aberration, Distortion, Breathing (Movie)
Power	Supplied Battery	One rechargeable battery pack NP-FZ100
Power	Battery Life (Still Images)	Approx. 520 shots (Viewfinder) / approx. 580 shots (LCD monitor) (CIPA standard)
Power	Battery Life (Movie, actual recording)	Approx. 100 min (Viewfinder) / Approx. 110 min (LCD monitor) (CIPA standard)
Power	Battery Life (Movie, continuous recording)	Approx. 170 min (Viewfinder) / Approx. 175 min (LCD monitor) (CIPA standard)
Power	Internal Battery Charge	Yes (Available with USB Type-C Terminal. USB Power Delivery compatible)
Power	USB Power supply	Yes (Available with USB Type-C Terminal. USB Power Delivery compatible)
		-
Power	Power consumption with Viewfinder	Still images: approx. 3.8 W (with FE 28-70 mm F3.5-5.6 OSS lens attached), Movies: approx. 5.7 W (with FE 28-70 mm F3.5-5.6 OSS lens attached)
Power	Power consumption with LCD screen	Still images: approx. 3.4 W (with FE 28-70 mm F3.5-5.6 OSS lens attached), Movies: approx. 5.6 W (with FE 28-70 mm F3.5-5.6 OSS lens attached)
Size & Weight	Weight (with battery and memory card included)	Approx. 658 g



Size & Weight	Weight (with battery and memory card included)	approx. 1 lb 7.3 oz
		Approx. 573 g
		approx. 1 lb 4.3 oz
Size & Weight	Dimensions (W x H x D)	Approx. 131.3 mm x 96.4 mm x 79.8 mm, Approx. 131.3 mm x 96.4 mm x 69.7 mm (FROM GRIP TO MONITOR)
Size & Weight	Dimensions (W x H x D)	Approx. 5 1/4 x 3 7/8 x 3 1/4 inches, Approx. 5 1/4 x 3 7/8 x 2 3/4 inches (FROM GRIP TO MONITOR)
Others	Operating Temperature	0 - 40 °C / 32 - 104 °F
		SEL2870
		Rechargeable Battery NP-FZ100
		AC adaptor
		Power cord
		Shoulder strap
		Body cap
		Accessory shoe cap
		Eyepiece cup
		USB-A to USB-C cable (USB 3.2)
		Lens hood
		Lens cap
		Lens rear cap