



# Clifton Cameras Product Specification

## Sony ZV-1 Vlogging Camera

### Specifications

#### Sensor

SENSOR TYPE	1.0-type (13.2mm x 8.8mm) Exmor RS CMOS sensor, aspect ratio 3:2
NUMBER OF PIXELS (EFFECTIVE)	Approx. 20.1 Megapixels

#### Lens

LENS TYPE	ZEISS Vario-Sonnar T* Lens, 10 elements in 9 groups (9 aspheric elements including AA lens)	
F-NUMBER (MAXIMUM APERTURE)	F1.8 (W) - 2.8 (T)	
ND FILTER	Auto / On (3 steps) / Off	
FOCAL LENGTH (F=)	f=9.4-25.7mm	
ANGLE OF VIEW (35MM FORMAT EQUIVALENT)	84 deg. - 34 deg. (24-70mm) <sup>2</sup>	
FOCUS RANGE (FROM THE FRONT OF THE LENS)	AF (W: Approx. 5cm (0.17 ft.) to Infinity, T: Approx. 30cm (0.99 ft.) to Infinity)	
OPTICAL ZOOM	2.7x	
CLEAR IMAGE ZOOM (STILL IMAGE)	20M Approx. 5.8x / 10M Approx. 8.2x / 5.0M Approx. 11x / VGA Approx. 44x	
CLEAR IMAGE ZOOM (MOVIE)	4K: 4.35x, HD: Approx. 5.8x	
DIGITAL ZOOM (STILL IMAGE)	20M Approx. 11x / 10M Approx. 16x / 5.0M Approx. 23x / VGA Approx. 44x	
DIGITAL ZOOM (MOVIE)	Digital Zoom Approx. 11	

#### Screen

SCREEN TYPE	7.5cm (3.0 type) (4:3) / 921,600 dots / Xtra Fine / TFT LCD
ADJUSTABLE ANGLE	Opening Angle: approx. 176 deg., Rotation Angle: approx. 270 deg.
DISPLAY SELECTOR (FINDER/LCD)	-
MF ASSIST MAGNIFICATION	5.3x, 10.7x
TOUCH PANEL	Yes



## Camera

IMAGE PROCESSING ENGINE	Yes (BIONZ X)
STEADYSHOT (STILL IMAGE)	Optical
STEADYSHOT (MOVIE)	Yes (Optical type with electronic compensation, Anti Rolling type)
FOCUS TYPE	Fast Hybrid AF (phase-detection AF / contrast-detection AF)
FOCUS MODE	Single-shot AF, Automatic AF, Continuous AF, DMF, Manual Focus
FOCUS AREA	Wide (315 points (phase-detection AF), 425 points (contrast-detection AF)), Zone, Center, Flexible Spot (S/M/L), Expanded Flexible Spot, Tracking (Wide/Zone/Center/Flexible Spot(S/M/L)/Expanded Flexible Spot)
OBJECT TRACKING	Yes (Tracking)
EYE AF	[Still images] Human (Right/Left Eye Select) / Animal, [Movie] Human (Right/Left Eye Select)
LIGHT METERING MODE	Multi Pattern, Center Weighted, Spot, Entire Screen Avg, Highlight
EXPOSURE COMPENSATION	+/- 3.0EV, 1/3EV step
ISO SENSITIVITY (STILL IMAGE)(RECOMMENDED EXPOSURE INDEX)	Auto (ISO100-12800, selectable with upper / lower limit), 100/125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200/4000/5000/6400/8000/10000/12800 (Extendable to ISO64/80), Multi-Frame NR: Auto (ISO100-12800), 100/200/400/800/1600/3200/6400/12800/2560034
ISO SENSITIVITY (MOVIE)	Auto:(ISO125 Level-ISO12800 Level, selectable with upper / lower limit), 125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200/4000/5000/6400/8000/10000/12800
WHITE BALANCE MODES	Auto, Daylight, Shade, Cloudy, Incandescent, Fluor.: Warm White, Fluor.: Cool White, Fluor.: Day White, Fluor.: Daylight, Flash, Underwater Auto, C.Temp./Filter, Custom
WB MICRO ADJUSTMENT	Yes (G7 to M7,57-step) (A7 to B7,29-step)
SHUTTER SPEED	iAuto (4" - 1/2000) / Program Auto (30" - 1/2000) / Manual (Bulb, 30" - 1/2000) / Aperture Priority (30" - 1/2000) / Shutter Priority (30" - 1/2000)5
ELECTRONIC SHUTTER	iAuto (4" - 1/32000) / Program Auto (30" - 1/32000) / Manual (30" - 1/32000) / Aperture Priority (30" - 1/32000) / Shutter Priority (30" - 1/32000)



#### APERTURE

iAuto (F1.8/F11(W)) / Program Auto (F1.8/F11(W)) / Manual (F1.8/F11(W)) / Shutter Priority (F1.8/F11(W)) / Aperture Priority (F1.8/F11(W))

#### IMAGE CONTROL

Contrast, Saturation, Sharpness, Creative Style, Color Space (sRGB / Adobe RGB), Quality (RAW / RAW & JPEG (Extra fine, Fine, Standard) / JPEG (Extra fine, Fine, Standard))

#### NOISE REDUCTION

Long exposure NR: On/Off, available of shutter speeds longer than 1/3 sec., high ISO NR: Normal/Low/Off, Multi Frame NR: Auto, ISO100-25600

#### DYNAMIC RANGE FUNCTIONS

Off, Dynamic Range Optimizer (Auto/Level 1-5), Auto High Dynamic Range (Auto Exposure Difference, Exposure difference Level (1.0-6.0EV, 1.0EV step))

#### SHOOTING MODE

AUTO (Intelligent Auto), Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure, MR (Memory Recall) [body 3 sets / memory card 4 sets], Movie Mode (Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure), Movie AUTO (Intelligent Auto), HFR Mode (Program Auto, Aperture Priority, Shutter Speed Priority, Manual Exposure), Panorama, Scene Selection

#### SCENE SELECTION

Portrait, Sports Action, Macro, Landscape, Sunset, Night Scene, Handheld Twilight, Night Portrait, Anti Motion Blur, Pet Mode, Gourmet, Fireworks, High Sensitivity

#### CONTINUOUS SHOOTING SPEED (MAXIMUM) (WITH MAX. RECORDING PIXELS)

Continuous Shooting Hi: approx. 24 fps, Continuous Shooting Mid: approx. 10 fps, Continuous Shooting Low: approx. 3.0 fps<sup>678</sup>

#### SELF-TIMER

10sec. / 5sec. / 2sec. / 3 or 5 consecutive shots with 10sec. 5sec. or 2sec. delay selectable / Bracketing shots with 10sec. 5sec. or 2sec. delay selectable

#### DRIVE MODES

Single, Continuous shooting, Self-timer, Self-timer(cont.), Cont.-bracketing<sup>9</sup>, Single-bracketing<sup>9</sup>, White balance bracketing<sup>9</sup>, DRO bracketing<sup>9</sup>

#### INTERVAL REC

Yes (1-60 sec. interval, 1-9999 shots, AE lock/AE tracking (High/Mid/Low))<sup>10</sup>

#### PANORAMA (SHOOTING)

Sweep Panorama

#### PICTURE EFFECT



[Still Image]: Toy camera, Pop Color, Posterization, Retro Photo, Soft High-key, Partial Color, High Contrast Mono., Soft Focus, HDR Painting, Richtone Monochrome, Miniature, Watercolor, Illustration, [Movie]: Toy camera, Pop Color, Posterization, Retro Photo, Soft High-key, Partial Color, High Contrast Mono.

#### CREATIVE STYLE

Standard, Vivid, Portrait, Landscape, Night Scene, Black & White, Sepia

#### PICTURE PROFILE

off/PP1-PP10 (Black Level, Gamma (Movie, Still, Cine1-2, ITU709, ITU709 [800%], S-Log2, S-Log3, HLG, HLG1, HLG2, HLG3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset)

#### NUMBER OF RECOGNISED SCENES

Still Image: iAuto: 33, Movie: off/PP1-PP10 (Black Level, Gamma (Movie, Still, Cine1-2, ITU709, ITU709 [800%], S-Log2, S-Log3, HLG, HLG1, HLG2, HLG3), Black Gamma, Knee, Color Mode, Saturation, Color Phase, Color Depth, Detail, Copy, Reset)

### Flash

FLASH MODE Auto / Flash On / Slow Synchro / Rear Sync / Flash Off

FLASH TYPE -

AF ILLUMINATOR -

BRACKETING -

### Recording

#### COMPATIBLE RECORDING MEDIA

[XAVC S (100Mbps)] SDXC/SDHC Memory Card (UHS-I U3 or higher); [XAVC S (60Mbps/50Mbps)] SDXC/SDHC Memory Card (Class 10 or higher); [AVCHD/Still image] Memory Stick Duo, Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick Micro11, Memory Stick Micro(Mark2)11, SDXC/SDHC/SD Memory Card (Class 4 or higher), micro SDXC/SDHC/SD Memory Card (Class 4 or higher)1112

#### RECORDING FORMAT

[Still Image]: JPEG (DCF Ver.2.0, Exif Ver.2.31, MPF Baseline compliant), RAW (Sony ARW 2.3 format), [Movie]: XAVC S, AVCHD format Ver.2.0 compatible

#### RECORDING FORMAT (MOVIE AUDIO)

XAVC S: LPCM 2ch, AVCHD: Dolby Digital (AC-3) 2ch (Dolby Digital Stereo Creator)

#### COLOUR SPACE (STILL)

sRGB, Adobe RGB

#### DCF/DPOF

DCF/DPOF/EXIF/MPF



#### STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE)

3:2 mode: 20M (5,472x3,648) / 10M (3,888x2,592) / 5M (2,736x1,824), 4:3 mode: 18M (4,864x3,648) / 10M (3,648x2,736) / 5M (2,592x1,944) / VGA, 16:9 mode: 17M (5,472x3,080) / 7.5M (3,648x2,056) / 4.2M (2,720x1,528), 1:1 mode: 13M (3,648x3,648) / 6.5M (2,544x2,544) / 3.7M (1,920x1,920), Sweep Panorama: Wide (12,416x1,856/5,536x2,160), Standard (8,192x1,856/3,872x2,160)

#### MOVIE RECORDING MODE (NTSC)

NTSC/PAL Selector: [NTSC] AVCHD: 24M FX (1,920x1,080/60i) / 17M FH(1,920x1,080/60i), XAVC S 4K: 30p 100M (3,840x2,160/30p) / 30p 60M (3,840x2,160/30p) / 24p 100M (3,840x2,160/24p) / 24p 60M (3,840x2,160/24p), XAV C S HD:60p 50M (1,920x1,080/60p) / 60p 25M (1,920x1,080/60p) / 30p 50M (1,920x1,080/30p) / 30p 16M (1,920x1,080/30p) / 24p 50M (1,920x1,080/24p) / 120p 100M (1,920x1,080/120p) / 120p 60M (1,920x1,080/120p)

#### MOVIE RECORDING MODE (PAL)

NTSC/PAL Selector: [PAL] mode AVCHD: 24M FX (1,920x1,080/50i) / 17M FH (1,920x1,080/50i), XAVC S 4K: 25p 100M (3,840x2,160/25p) / 25p 60M (3,840x2,160/25p), XAVC S HD: 50p 50M (1,920x1,080/50p) / 50p 25M (1,920x1,080/50p) / 25p 50M (1,920x1,080/25p) / 25p 16M (1,920x1,080/25p) / 100p 100M (1,920x1,080/100p) / 100p 60M (1,920x1,080/100p)

#### HFR

Recording: NTSC/PAL Selector: [PAL] mode XAVC S HD: 50p 50M (1,920x1,080/250fps), 50p 50M (1,920x1,080/500fps), 50p 50M (1,920x1,080/1000fps) / 25p 50M (1,920x1,080/250fps), 25p 50M (1,920x1,080/500fps), 25p 50M (1,920x1,080/1000fps), NTSC/PAL Selector: [NTSC] mode XAVC S HD: 60p 50M (1,920x1,080/240fps), 60p 50M (1,920x1,080/480fps), 60p 50M (1,920x1,080/960fps) / 30p 50M (1,920x1,080/240fps), 30p 50M (1,920x1,080/480fps), 30p 50M (1,920x1,080/960fps) / 24p 50M (1,920x1,080/240fps), 24p 50M (1,920x1,080/480fps), 24p 50M (1,920x1,080/960fps) Sensor Readout Number of effective pixels: Quality Priority: 240fps/250fps (1,824x1,026), 480fps/500fps (1,824x616), 960fps/1000fps (1,244x420)/ Shoot Time Priority: 240fps/250fps (1,824x616), 480fps/500fps (1,292x436), 960fps/1000fps (912x308)

#### STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE) DURING MOVIE

16:9 mode: 17M (5,472x3,080) / 7.5M (3,648x2,056) / 4.2M (2,720x1,528)

#### PROXY RECORDING

Yes (1280 x 720 (Approx. 9Mbps))

## Interface

#### INPUT AND OUTPUT TERMINALS

Multi/Micro USB Terminal\*15, Hi-Speed USB (USB2.0), Micro HDMI, Microphone jack (3.5mm Stereo mini jack), Multi Interface Shoe

NFC

-

WI-FI

Yes (IEEE802.11b/g/n (2.4GHz band))

INTERFACES

-

BLUETOOTH

Yes (Bluetooth Standard Ver. 4.1 (2.4GHz band))



## Power

POWER SOURCE	DC3.6V (supplied battery)
BATTERY SYSTEM	Rechargeable battery pack NP-BX1
POWER CONSUMPTION (CAMERA MODE)	Approx. 2.1W with LCD monitor (CIPA standard)
USB CHARGE/USB POWER SUPPLY	Yes (Shooting, Playback)
BATTERY LIFE(STILL IMAGES)(CIPA)	Monitor: Approx. 260 / Approx. 130min., Monitor (When Auto Monitor off is set to 2sec): Approx. 410 / Approx. 205min.13
BATTERY LIFE(MOVIES ACTUAL SHOOTING)(CIPA)	Monitor: Approx. 45min.141516
BATTERY LIFE(MOVIES CONTINUOUS SHOOTING)(CIPA)	Monitor: Approx. 75min.1415

## Others

PLAYMEMORIES CAMERA APPS -

### SHOOTING FUNCTIONS

Product Showcase Set, Background Defocus, Face Detection, Face Registration, Still Image Recording (during movie recording), Smile shutter, Grid Line, Digital Level Gauge (pitch and roll), WB Bracket, DRO Bracketing, MF Assist, Peaking (Display:Off/On) (Level: High/Mid/Low) (Color: Red/Yellow/Blue/White), Zebra, Marker Display, Audio Rec Level, Audio Level Display, Self-portrait timer, TC/UB, PC Remote Control, Gamma Disp. Assist, [Mov] AF Tracking Sensitivity, [Mov] AF Drive Speed, Set File Name, Touch Shutter/Touch Focus/Touch Tracking, My Menu, Soft Skin Effect

### PLAYBACK FUNCTIONS

BRAVIA Sync (Control for HDMI), 9/25-frame index view, Auto Orientation, Slide Show, Forward/Rewind (Movie), Delete, Protect, Motion Shot Video, Beauty Effect, Photo Capture, Rating, Automatic Image Rotation

TRILUMINOS COLOR	Yes17
4K IMAGE OUTPUT	Yes
OPERATING TEMPERATURE	0 degrees C. - +40 degrees C. / 32 degrees F. - 104 degrees F.

## Print

PRINT Exif Print,PRINT Image Matching (PIM3)

## Size & Weight

### DIMENSIONS (W X H X D) (APPROX.)

105.5 x 60.0 x 43.5 mm (4 1/4in. x 2 3/8 in. x 1 3/4 in.)

### WEIGHT (CIPA COMPLIANT)



Approx. 294g (10.4oz.)(Battery and Memory Card are included) / Approx. 267g (9.5oz.)(Body Only)

## What's In The Box

Rechargeable Battery Pack (NP-BX1) |

| Wind Screen | Wind Screen Adaptor | Instruction Manual