

ZV-1 Camera

Sensor

SENSOR TYPE 1.0"-type (0.52" x 0.35") 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 = 9.4–25.7 mm
ANGLE OF VIEW (35 MM FORMAT EQUIVALENT) 84 deg.–34 deg. (24–70 mm)₁
FOCUS RANGE (FROM THE FRONT OF THE LENS) AF (W: Approx. 0.17 ft (5 cm) to Infinity, T: Approx. 0.99 ft (30 cm) to Infinity)
OPTICAL ZOOM 2.7x
CLEAR IMAGE ZOOM (STILL IMAGE) 20 M Approx. 5.8x / 10 M Approx. 8.2x / 5.0 M Approx. 11x / VGA Approx. 44x
CLEAR IMAGE ZOOM (MOVIE) 4K: 4.35x, HD: Approx. 5.8x
DIGITAL ZOOM (STILL IMAGE) 20 M Approx. 11x/10 M Approx. 16x/5.0 M Approx. 23x/VGA Approx. 44x
DIGITAL ZOOM (MOVIE) Digital Zoom Approx. 11

Screen

SCREEN TYPE 7.5 cm (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) -
MS 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),
100/200/400/800/1600/3200/6400/12800/25600²³

ISO SENSITIVITY (MOVIE)

Auto (ISO125 Level–ISO12800 Level, selectable with upper/lower limit),
125/160/200/250/320/400/500/640/800/1000/1250/1600/2000/2500/3200/4000/5000/6400/800
0/10000/12800

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"–1/2,000)/Program Auto (30"–1/2,000)/Manual (Bulb, 30"–1/2,000)/Aperture Priority
(30"–1/2,000)/Shutter Priority (30"–1/2,000)⁴

ELECTRONIC SHUTTER

iAuto (4"–1/32,000) / Program Auto (30"–1/32,000) Manual (30"–1/32,000) / Aperture Priority
(30"–1/32,000) / Shutter Priority (30"–1/32,000)

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 at 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 (1.0–6.0 EV, 1.0 EV
step))

SHOOTING MODE

AUTO (Intelligent Auto), Program Auto, Aperture Priority, Shutter Speed
Priority, Manual Exposure, MR (Memory Recall) [body three sets/memory
card four 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 fps⁵⁶⁷

SELF-TIMER

	10 s / 5 s / 2 s / 3 or 5 consecutive shots with 10 s 5 s or 2 s delay selectable/Bracketing shots with 10 s 5 s or 2 s delay selectable
DRIVE MODES	Single, Continuous shooting, Self-timer, Self-timer (cont.), Cont.-bracketing ^g , Single-bracketing ^g , White-balance bracketing ^g , DRO bracketing ^g
INTERVAL REC	Yes (1–60 sec. interval, 1-9,999 shots, AE lock/AE tracking (High/Mid/Low)) ⁹
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 RECOGNIZED 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 (100 Mbps)] SDXC/SDHC Memory Card (UHS-I U3 or higher); [XAVC S (60 Mbps/50 Mbps)] 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 Micro ¹⁰ , Memory Stick Micro (Mark2) ¹⁰ , SDXC/SDHC/SD Memory Card (Class 4 or higher), micro SDXC/SDHC/SD Memory Card (Class 4 or higher) ¹⁰¹¹
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)
COLOR SPACE (STILL)	sRGB, Adobe® RGB
DCF/DPOF	DCF/DPOF/EXIF/MPF
STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE)	3:2 mode: 20 M (5,472 x 3,648)/10 M (3,888 x 2,592)/5 M (2,736 x 1,824), 4:3 mode: 18 M (4,864 x 3,648)/10 M (3,648 x 2,736)/5 M (2,592 x 1,944)/VGA, 16:9 mode: 17 M (5,472 x 3,080)/7.5 M (3,648 x 2,056)/4.2 M (2,720 x 1,528), 1:1 mode: 13 M (3,648 x 3,648)/6.5 M (2,544 x 2,544)/3.7 M (1,920 x 1,920), Sweep Panorama: Wide (12,416 x 1,856/5,536 x 2,160), Standard (8,192 x 1,856/3,872 x 2,160)
MOVIE RECORDING MODE (NTSC)	

	NTSC/PAL Selector: [NTSC] AVCHD: 24 M FX (1,920 x 1,080/60i) / 17 M FH(1,920 x 1,080/60i), XAVC S 4K: 30p 100 M (3,840 x 2,160/30p) / 30p 60 M (3,840 x 2,160/30p) / 24p 100 M (3,840 x 2,160/24p) / 24p 60 M (3,840 x 2,160/24p), XAVC S HD: 60p 50 M (1,920 x 1,080/60p) / 60p 25 M (1,920 x 1,080/60p) / 30p 50 M (1,920 x 1,080/30p) / 30p 16 M (1,920 x 1,080/30p) / 24p 50 M (1,920 x 1,080/24p) / 120p 100 M (1,920 x 1,080/120p) / 120p 60 M (1,920 x 1,080/120p)
MOVIE RECORDING MODE (PAL)	NTSC/PAL Selector: [PAL] mode AVCHD: 24 M FX (1,920 x 1,080/50i) / 17 M FH (1,920 x 1,080/50i), XAVC S 4K: 25p 100 M (3,840 x 2,160/25p) / 25p 60 M (3,840 x 2,160/25p), XAVC S HD: 50p 50 M (1,920 x 1,080/50p) / 50p 25 M (1,920 x 1,080/50p) / 25p 50 M (1,920 x 1,080/25p) / 25p 16 M (1,920 x 1,080/25p) / 100p 100 M (1,920 x 1,080/100p) / 100p 60 M (1,920 x 1,080/100p)
HFR	Recording: NTSC/PAL Selector: [PAL] mode XAVC S HD: 50p 50 M (1,920 x 1,080/250fps), 50p 50 M (1,920 x 1,080/500fps), 50p 50 M (1,920 x 1,080/1,000fps) / 25p 50 M (1,920 x 1,080/250fps), 25p 50 M (1,920 x 1,080/500fps), 25p 50 M (1,920 x 1,080/1,000fps), NTSC/PAL Selector: [NTSC] mode XAVC S HD: 60p 50 M (1,920 x 1,080/240fps), 60p 50 M (1,920 x 1,080/480fps), 60p 50 M (1,920 x 1,080/960fps) / 30p 50 M (1,920 x 1,080/240fps), 30p 50 M (1,920 x 1,080/480fps), 30p 50 M (1,920 x 1,080/960fps) / 24p 50 M (1,920 x 1,080/240fps), 24p 50 M (1,920 x 1,080/480fps), 24p 50 M (1,920 x 1,080/960fps) Sensor Readout Number of effective pixels: Quality Priority: 240fps/250fps (1,824 x 1,026), 480fps/500fps (1,824 x 616), 960fps/1,000fps (1,244 x 420)/ Shoot Time Priority: 240fps/250fps (1,824 x 616), 480fps/500fps (1,292 x 436), 960fps/1,000fps (912 x 308)
STILL IMAGE NUMBER OF RECORDED PIXELS (IMAGE SIZE) DURING MOVIE	16:9 mode: 17M (5,472 x 3,080) / 7.5M (3,648 x 2,056) / 4.2M (2,720 x 1,528)
PROXY RECORDING	Yes (1,280 x 720 (Approx. 9 Mbps))

Interface

INPUT AND OUTPUT TERMINALS

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

NFC

-

WI-FI

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

INTERFACES

-

BLUETOOTH

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

Power

POWER SOURCE

DC 3.6 V (supplied battery)

BATTERY SYSTEM

Rechargeable battery pack NP-BX1

POWER CONSUMPTION (CAMERA MODE)

Approx. 2.1 W with LCD monitor (CIPA standard)

USB CHARGE/USB POWER SUPPLY

Yes (Shooting, Playback)

BATTERY LIFE(STILL IMAGES)(CIPA)

Monitor: approx. 260/approx. 130 min., Monitor (when Auto Monitor off is set to 2 s): approx. 410/approx. 205 min.¹²

BATTERY LIFE(MOVIES ACTUAL SHOOTING)(CIPA)

BATTERY LIFE(MOVIES CONTINUOUS SHOOTING)(CIPA) Monitor: Approx. 45 min.[131415](#)
Monitor: Approx. 75 min.[1314](#)

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, Step Zoom/Quick Zoom, 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, Slideshow, Forward/Rewind (Movie), Delete, Protect, Motion Shot Video, Beauty Effect, Photo Capture, Rating, Automatic Image Rotation

TRILUMINOS COLOR

Yes¹⁶

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.)

4-1/4" x 2-3/8" x 1-3/4" (105.5 x 60.0 x 43.5 mm)

WEIGHT (CIPA COMPLIANT)

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

What's In The Box

- Rechargeable Battery Pack (NP-BX1), Micro USB Cable, Wind Screen, Wind Screen Adaptor, Instruction Manual