

Camera Type

Interchangeable Lens Digital Camera

Lens Mount

E-Mount

Image sensor Type

35mm Full Frame (35.6 x 23.8mm), Exmor R CMOS Sensor

Number of pixels (effective)

Approx. 24.2 megapixels

Number of pixels (total)

Approx. 25.3 megapixels

Image sensor aspect ratio

3:2

Color filter

R, G, B primary color

Anti-Dust function

Yes (Charge protection coating on optical filter and image sensor shift mechanism)

Still image recording format

JPEG (DCF Ver. 2.0, Exif Ver.2.32, MPF Baseline compliant), RAW (Sony ARW 2.3 format)

Image size (pixels) [3:2]

35mm full frame L: 6000 x 4000 (24M), M: 3936 x 2624 (10M), S: 3008 x 2000 (6.0M)

APS-C L: 3936 x 2624 (10M), M: 3008 x 2000 (6.0M), S: 1968 x 1312 (2.6M)

Image size (pixels) [4:3]

35mm full frame L: 5328 x 4000 (21M), M: 3488 x 2624 (9.2M), S: 2656 x 2000 (5.3M)

APS-C L: 3488 x 2624 (9.2M), M: 2656 x 2000 (5.3M), S: 1744 x 1312 (2.3M)

Image size (pixels) [16:9]

35mm full frame L: 6000 x 3376 (20M), M: 3936 x 2216 (8.7M), S: 3008 x 1688 (5.1M)

APS-C L: 3936 x 2216 (8.7M), M: 3008 x 1688 (5.1M), S: 1968 x 1112 (2.2M)

Image size (pixels) [1:1]

35mm full frame L: 4000 x 4000 (16M), M: 2624 x 2624 (6.9M), S: 2000 x 2000 (4.0M)

APS-C L: 2624 x 2624 (6.9M), M: 2000 x 2000 (4.0M), S: 1312 x 1312 (1.7M)

Image quality modes

RAW (Compressed / Uncompressed)

JPEG (Extra fine / Fine / Standard)

RAW & JPEG

14bit RAW

Yes

Picture Effect

8 types: Toy Camera (Normal / Cool / Warm / Green / Magenta), Pop Color, Posterization (Color, B/W), Retro Photo, Soft High-key, Partial Color (R/G/B/Y), High Contrast Monochrome, Rich-tone Monochrome

Creative Style

Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn leaves, Black & White, Sepia, Style Box (1–6)

Picture Profile

Yes (Off / PP1–PP10) Parameters: Black level, Gamma (Movie, Still, 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

Dynamic Range functions

Off, Dynamic Range Optimizer, Auto High Dynamic Range

Color space

sRGB standard (with sYCC gamut) and Adobe RGB standard compatible with TRILUMINOS Color

Movie Recording format

XAVC S

Video compression

XAVC S: MPEG–4 AVC/H.264

Audio recording format

XAVC S: LPCM 2ch

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Color space

xvYCC standard (x.v.Color when connected via HDMI cable) compatible with TRILUMINOS Color

Movie recording system

XAVC S 4K

3840 x 2160 (4:2:0, 8bit, NTSC) (Approx.)

30p (100Mbps / 60Mbps)

24p (100Mbps / 60Mbps)

3840 x 2160 (4:2:0, 8bit, PAL) (Approx.)

25p (100Mbps / 60Mbps)

XAVC S HD

1920 x 1080 (4:2:0, 8bit, NTSC) (Approx.).

120p (100Mbps / 60Mbps)

60p (50Mbps / 25Mbps)

30p (50Mbps / 16Mbps)

24p (50Mbps)

1920 x 1080 (4:2:0, 8bit, PAL) (Approx.)

100p (100Mbps / 60Mbps)

50p (50Mbps / 25Mbps)

25p (50Mbps / 16Mbps)

Slow & Quick Motion image frame rate

NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps

PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps

Audio Level Display

Yes

Audio Rec Level

Yes

PAL/NTSC Selector

Yes

Proxy Recording

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

TC/UB

Yes

Auto Slow Shutter

Yes

Gamma Disp. Assist

Yes

Location info Link from smartphone

Yes

Media

SD memory card

SDHC memory card (UHS-I/II compliant)

SDXC memory card (UHS-I/II compliant)

Memory card slot

Slot for SD (UHS-I/II compliant) memory card

File system

FAT12, 16, 32, exFAT

Noise reduction

Long exposure NR: On/Off, available at shutter speeds longer than 1 sec.

High ISO NR: Normal / Low / Off

White balance Modes

Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent / Flash / Underwater / Color

Temperature (2500 to 9900K) & color filter / Custom

Shutter AWB Lock

Yes (Shut. Halfway Down / Cont. Shooting / Off)

Focus system Type

Fast Hybrid AF (phase-detection AF / contrast-detection AF)

Focus point

35mm full frame: 693 points (phase-detection AF)

APS-C mode with FF lens: 299 points (phase-detection AF)

with APS-C lens: 221 points (phase-detection AF) / 425 points (contrast-detection AF)

Sensitivity range

EV-4 to EV20 (ISO100 equivalent with F2.0 lens attached)

AF mode

AF-A (Automatic AF), AF-S (Single-shot AF), AF-C (Continuous AF), DMF (Direct Manual Focus),
Manual Focus

Focus area

Wide / Zone / Center / Flexible Spot / Expanded Flexible Spot / Tracking

Eye-start AF

Yes (only with LA-EA2 or LA-EA4 attached (Sold separately))

Eye AF

[Still images] Human (Right/Left Eye Select) / Animal

[Movie] Human (Right/Left Eye Select)

Other features

Predictive control

Focus lock

AF Track Sens. (Still)

AF Subj. Shift Sensitivity (Movie)

AF Transition Speed (Movie)

Switch V/H AF Area

AF Area Regist.

Circ. of Focus Point

AF illuminator

Yes (with Built-in LED type)

AF illuminator range

Approx. 0.3m – approx. 3.0m (with FE 28–70mm F3.5–5.6 OSS lens attached)

AF micro adjustment

Yes, (Sold separately) with LA-EA2 or LA-EA4

Metering type

1200-zone evaluative metering

Metering sensor

Exmor R CMOS sensor

Metering sensitivity

EV-3 to EV20 (ISO100 equivalent with F2.0 lens attached)

Modes

Multi-segment

Center-weighted

Spot (Standard / Large)

Entire Screen Avg.

Highlight

Exposure modes

AUTO (iAuto)

Programmed AE (P)

Aperture priority (A)

Shutter-speed priority (S)

Manual (M)

Movie (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M))

Slow & Quick Motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (s) / Manual (M))

Exposure compensation

+/- 5.0EV (1/3 EV, 1/2 EV steps selectable) (with exposure compensation dial: +/- 3EV (1/3 EV steps))

Bracketing

Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. (Ambient light, Flash light)

AE Lock

Locked when shutter button is pressed halfway. (On/Off/Auto)

ISO sensitivity (Recommended Exp. Index)

Still images: ISO 100–51200 (ISO numbers up 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)

Anti-flicker Shoot

Yes

Viewfinder Type

1.0 cm (0.39 type) electronic viewfinder (XGA OLED)

Number of dots

2,359,296 dots

Control function

Brightness, Color temperature

Field coverage

1

Magnification

Approx. 0.59x (with 50mm lens at infinity, -1m)

Diopter adjustment

-4.0 to +3.0m

Eye point

Approx. 20mm from the eyepiece lens, 17.5mm from the eyepiece frame at -1m (CIPA standard)

Display function

Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check, Peaking MF, Zebra, Movie marker

Finder Frame Rate selection

NTSC mode: STD 60fps / HI 120fps, PAL mode: STD 50fps / HI 100fps

LCD screen Type

7.5cm (3.0-type) type TFT

Touch panel

Yes (Touch shutter / Touch focus / Touch pad / Touch tracking)

Number of dots (total)

921,600 dots

Brightness control

Manual (5 steps between -2 and +2), Sunny Weather mode

Display function

Histogram, Real-time image-adjustment display, Digital level gauge, Grid line, Focus check, Peaking MF, Zebra, Movie marker, For viewfinder, Monitor Off

Adjustable angle

Opening Angle: Approx. 176 Degree, Rotation Angle: Approx. 270 Degree

Focus Check

Yes, Focus Magnifier (35mm full frame: 5.9x / 11.7x, APS-C: 3.8x / 7.7x)

Face detection Modes

Face Priority in AF, Face Priority in Multi Metering, Regist. Faces Priority

Interval recording

Yes

ISO AUTO Min. SS

Yes

Bright Monitoring

Yes

Copyright Info

Yes

Set File Name

Yes

Help guide

Yes

Video Light Mode

Yes

Zoom Ring Rotate

Yes

Clear Image Zoom Still images

Approx. 2x

Clear Image Zoom Movies

Approx. 1.5x (4K), Approx. 2x (HD)

Smart zoom (Still images)

35mm full frame: M: approx. 1.5x, S: approx. 2x / APS-C: M: approx. 1.3x, S: approx. 2x

Digital zoom (Still images)

35mm full frame: L: approx. 4x, M: approx. 6.1x, S: approx. 8x / APS-C: L: approx. 4x, M: approx. 5.2x, S: approx. 8x

Digital zoom (Movie)

35mm full frame: approx. 4x, APS-C: approx. 4x

Shutter Type

Electronically-controlled, vertical-traverse, focal-plane type

Shutter Type

Mechanical shutter / Electronic shutter

Shutter speed

Still images (Mechanical Shutter): 1/4000 to 30 sec., Bulb, Still images (Electronic Shutter): 1/8000 to 30 sec., Bulb, Movies (NTSC mode) : 1/4000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode), Movies (PAL mode) : 1/4000 to 1/4 (1/3 steps), up to 1/50 in AUTO mode (up to 1/25 in Auto slow shutter mode)

Flash sync. Speed

1/160 sec.

Silent Shooting

Yes (ON/OFF)

Image stabilization Type

Image Sensor-Shift mechanism with 5-axis compensation (Compensation depends on lens specifications)

Compensation effect (Still images)

5 stops (based on CIPA standard. Pitch/yaw shake only. With Planar T* FE 50mm F1.4 ZA lens mounted. Long exposure NR off.)

Image stabilization Mode

On / Off

Flash Control

Pre-flash TTL

Flash compensation

+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)

Flash modes

Flash off

Autoflash

Fill-flash

Slow Sync.

Rear Sync.

Red-eye reduction (on/off selectable)

Wireless

Hi-speed sync.

External flash

Sony alpha System Flash compatible with Multi Interface Shoe, attach the shoe adaptor for flash compatible with Auto-lock accessory shoe

FE level lock

Yes

Wireless control

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 modes

Single Shooting

Continuous shooting (Hi+/Hi/Mid/Lo selectable)

Self-timer

Self-time (Cont.)

Bracket: Single

Bracket: Cont.

White Balance bracket

DRO bracket

Self-timer

10 sec. delay / 5 sec. delay / 2 sec. delay / Continuous self-time / Bracketing self-timer

Speed (approx., max.)

Continuous shooting: Hi+: 10 fps, Hi: 8 fps, Mid: 6 fps, Lo: 3 fps

No. of frame recordable (approx.)

JPEG Extra fine L: over 215 frames

JPEG Fine L: over 223 frames

JPEG Standard L: over 216 frames

RAW: over 115 frames

RAW & JPG: over 86 frames

RAW (Uncompressed): over 45 frames

RAW (Uncompressed) & JPG: over 39 frames

Playback Modes

Single (with or without shooting information Y RGB histogram & highlight / shadow warning)

Index view

Enlarged display mode (L: 18.8x, M: 12.3x, S: 9.4x)

Auto Review

Image orientation

Slideshow

Folder selection (Date / Still / XAVC S HD / XAVC S 4K)

Protect

Rating

Display as Group

Photo Capture

Yes

PC interface

Mass-storage / MTP

USB Type-C Terminal

Yes (SuperSpeed USB 5Gbps (USB 3.2) compatible)

NFC

Yes (NFC forum Type 3 Tag compatible)

Wireless LAN (built-in)

Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac (2.4GHz band/5GHz band))

Bluetooth

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

HDMI connector

HDMI micro connector (Type-D)

3840 x 2160 (30p / 25p / 24p) / 1920 x 1080 (60p / 50p / 24p) / 1920 x 1080 (60i / 50i), YCbCr
4:2:2 8bit / RGB 8bit

Multi Interface Shoe

Yes (with Digital Audio Interface)

Mic Terminal

Yes (3.5 mm Stereo minijack)

Headphone Terminal

Yes (3.5 mm Stereo minijack)

Remote Control (Wireless)

Yes (Bluetooth remote control)

Functions

FTP Transfer Func. (Wi-Fi)

View on Smartphone

Remote control via Smartphone

NFC One-touch remote

NFC One-touch sharing

PC Remote

BRAVIA Sync (Control for HDMI)

PhotoTV HD

Microphone

Built-in, stereo

Speaker

Built-in, monaural

Compatible standards

Exif Print, Print Image Matching III, DPOF setting

Custom key settings

Yes

My Menu

Yes

My Dial Settings

Yes

Reg Cust Shoot Set

Yes

Programmable Setting

Yes (Body 3 sets /memory card 4 sets)

Lens compensation

Peripheral Shading, Chromatic Aberration, Distortion

Battery

One rechargeable battery pack NP-FZ100

Still images

Approx. 680 shots (Viewfinder) / approx. 740 shots (LCD monitor) (CIPA standard)

Movies (actual recording)

Approx. 140 min. (Viewfinder) / Approx. 140 min. (LCD monitor) (CIPA standard)

Movies (continuous recording)

Approx. 220 min. (Viewfinder) / Approx. 215 min. (LCD monitor) (CIPA standard)

Internal battery charge

Yes

USB power supply

Yes

With Viewfinder

Still images: approx. 2.9W (with FE 28–60mm F4–5.6 lens attached)

Movies: approx. 4.5W (with FE 28–60mm F4–5.6 lens attached)

With LCD screen

Still images: approx. 2.7W (with FE 28–60mm F4–5.6 lens attached)

Movies: approx. 4.6W (with FE 28–60mm F4–5.6 lens attached)

Operating temperature

0 – 40 Degree C

Weight

With battery and memory Card included Approx. 509g

Body only Approx. 424g

Dimensions (W x H x D)

Approx. 124.0 x 71.1 x 59.7mm

From Grip to Monitor: Approx. 124.0 x 71.1 x 53.5mm