

At a Glance

Maximum Photo Resolution and Frame Rates

12.1 MP up to 10 fps

Maximum Movie Resolution and Frame Rates

4K / 120p HD / 240p

Maximum ISO Sensitivity

Photo: ISO 80-102400 (expandable: ISO 40-409600) Movie: ISO 80-102400 (expandable: ISO 80-409600)

Drive

Self-timer

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

Continuous Drive Speed (approx. max.)

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

DRIVE MODES

Single Shooting, Continuous shooting (Hi+/Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.), Bracket: Single, Bracket: Cont., White Balance bracket, DRO bracket

No. of recordable frames (approx.)

JPEG Extra fine L: over 1000 frames, JPEG Fine L: over 1000 frames, JPEG Standard L: over 1000 frames, RAW: over 1000 frames, RAW & JPG: over 1000 frames, RAW (Uncompressed): over 1000 frames, RAW (Uncompressed) & JPG: over 1000 frames

Pixel Shift Multi Shooting

-

Exposure

Exposure Compensation

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

AE Lock

Locked when shutter button is pressed halfway. Available with AE lock button. (On/Off/Auto)

Anti-Flicker Shoot.

Yes

Exposure Bracketing

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

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) / Flexible Exp. Mode), Slow & Quick Motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M) / Flexible Exp. Mode)

ISO Sensitivity (Recommended Exposure Index)

Still images: ISO 80–102400 (ISO numbers up from ISO 40 to ISO 409600 can be set as expanded ISO range.), Movies: ISO 80–102400 equivalent (ISO numbers up to ISO 409600 can be set as expanded ISO range.)

Metering Mode

Multi-segment, Center-weighted, Spot, Spot Standard/Large, Entire Screen Avg., Highlight

METERING SENSITIVITY

EV -3 to EV 20 (at ISO100 equivalent with F2.0 lens attached)

Metering Sensor

Exmor R® CMOS sensor

Metering Type

1200-zone evaluative metering

Scene Selection

-

Flash Control

Control

Pre-flash TTL

External Flash Compatibility

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

FE Level Lock

Yes

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.

Flash coverage

-

Guide No.

-

Recycling Time

-

type

-

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.)

Focus

Focus Area

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

Focus Mode

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

Focus Type

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

AF illuminator

Yes (with built-in LED type)

AF Illuminator range

Approx. 0.98 ft – approx. 0.98 ft (with FE 28-70 mm F3.5–5.6 OSS lens attached)

FOCUS POINT

35-mm full frame: 759 points (phase-detection AF), APS-C mode with FF lens: 345 points (phase-detection AF), with APS-C lens: 285 points (phase-detection AF) / 425 points (contrast-detection AF)

Focus Sensitivity Range

EV-6 to EV20 (ISO 100 equivalent with F2.0 lens attached)

Focus Sensor

Exmor R® CMOS sensor

Focus type with LA-EA3 (Sold separately)

Phase-detection

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

EYE AF

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

Image Sensor

Anti-Dust System

Yes (Charge protection coating on Optical Filter and ultrasonic vibration mechanism)

Aspect Ratio

3 : 2

Number of Pixels (Effective)

Approx. 12.1 megapixels

Number of Pixels (total)

Approx. 12.9 megapixels

Sensor Type

35 mm full frame (35.6 × 23.8 mm), Exmor R[®] CMOS sensor

LCD Screen

Adjustable Angle

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

Brightness Control

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

Focus Magnifier

Yes, Focus Magnifier (35-mm full frame: 2.1x / 4.1x, APS-C: 1.5x / 3.0x)

Monitor Type

2.95 inch (3.0-type) wide type TFT

Number of Dots

1,440,000 dots

Touch Panel

Yes

Noise Reduction

Noise Reduction

Long exposure NR: On/Off, available at shutter speeds longer than 1 s, High ISO NR: Normal / Low / Off

Recording (still images)

14bit RAW

Yes

Color Space

sRGB standard (with sYCC gamut), Adobe RGB standard and Rec. ITU-R BT.2100 standard (BT.2020 gamut). (compatible with TRILUMINOS Color)

Creative Style

-

Dynamic Range Functions

Off, Dynamic Range Optimizer (Auto/Level (1-5))

IMAGE SIZE (PIXELS) [1:1]

35mm full frame L: 2832 x 2832 (8 M), M: 1840 x 1840 (3.4 M), S: 1408 x 1408 (2.0 M), APS-C L: 1840 x 1840 (3.4 M), M: 1408 x 1408 (2.0 M), S: 912 x 912 (0.8 M)

Image Quality Modes

RAW (Compressed / Uncompressed), JPEG (Extra fine / Fine / Standard), HEIF(4:2:0 / 4:2:2) (Extra fine / Fine / Standard), RAW & JPEG, RAW & HEIF

Image Size (pixels) [16:9]

35-mm full frame L: 4240 x 2384 (10 M), M: 2768 x 1560 (4.3 M), S: 2128 x 1200 (2.6 M), APS-C L: 2768 x 1560 (4.3 M), M: 2128 x 1200 (2.6 M), S: 1376 x 776 (1.1 M)

Image Size (pixels) [3:2]

35-mm full frame L: 4240 x 2832 (12 M), M: 2768 x 1848 (5.1 M), S: 2128 x 1416 (3.0 M), APS-C L: 2768 x 1848 (5.1 M), M: 2128 x 1416 (3.0 M), S: 1376 x 920 (1.3 M)

Picture Effect

-

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

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)

IMAGE SIZE (PIXELS) [4:3]

35-mm full frame L: 3776 x 2832 (11 M), M: 2464 x 1848 (4.6 M), S: 1888 x 1416 (2.7 M), APS-C L: 2464 x 1848 (4.6 M), M: 1888 x 1416 (2.7 M), S: 1232 x 920 (1.1 M)

Creative Look

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

[Recording \(movie\)](#)

Audio Recording Format

XAVC S: LPCM 2ch, LPCM 2ch (48 kHz 16 bit), LPCM 2ch (48 kHz 24 bit), LPCM 4ch(48 kHz 24 bit), MPEG-4 AAC-LC 2ch

Color Space

Rec. ITU-R BT.2100 standard compatible (BT.2020 gamut). (compatible with TRILUMINOS Color)

Creative Style

-

Movie Functions

Audio Level Display, Audio Rec Level, PAL/NTSC Selector, Proxy Recording (1280 x 720 [6 Mbps], 1920 x 1080 [9 Mbps], 1920 x 1080 [16 Mbps]), TC/UB, Auto Slow Shutter, Gamma Disp. Assist, RAW Output(HDMI)

Picture Effect

-

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

Recording Format

XAVC S, XAVC HS

Slow & quick motion (shooting frame rate)

NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps, 240fps, PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps, 200fps* details of frame rate

Video Compression

XAVC S: MPEG-4 AVC/H.264, XAVC HS: MPEG-H HEVC/H.265

Creative Look

ST, PT, NT, VV, VV2, FL, IN, SH, BW, SE, Custom Look (1-6)

MOVIE RECORDING SYSTEM (XAVC HS 4K)

3840 x 2160 (4:2:0, 10bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps / 75 Mbps / 45 Mbps), 24p (100 Mbps / 50 Mbps / 30 Mbps); 3840 x 2160 (4:2:0, 10bit, PAL) (Approx.): 100p

(200 Mbps), 50p (150 Mbps / 75 Mbps / 45 Mbps); 3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps / 100 Mbps), 24p (100 Mbps / 50 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps / 100 Mbps)* details of frame rate

MOVIE RECORDING SYSTEM (XAVC S 4K)

3840 x 2160 (4:2:0, 8bit, NTSC) (Approx.): 120p (200 Mbps), 60p (150 Mbps), 30p (100 Mbps / 60 Mbps), 24p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:0, 8bit, PAL) (Approx.): 100p (200 Mbps), 50p (150 Mbps), 25p (100 Mbps / 60 Mbps); 3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 120p (280 Mbps), 60p (200 Mbps), 30p (140 Mbps), 24p (100 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 100p (280 Mbps), 50p (200 Mbps), 25p (140 Mbps)* details of frame rate

MOVIE RECORDING SYSTEM (XAVC S HD)

1920 x 1080 (4:2:0, 8bit, NTSC) (Approx.): 120p (100 Mbps / 60 Mbps), 60p (50 Mbps / 25 Mbps), 30p (50 Mbps / 16 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:0, 8bit, PAL) (Approx.): 100p (100 Mbps / 60 Mbps), 50p (50 Mbps / 25 Mbps), 25p (50 Mbps / 16 Mbps); 1920 x 1080 (4:2:2, 10bit, NTSC) (Approx.): 60p (50 Mbps), 30p (50 Mbps), 24p (50 Mbps); 1920 x 1080 (4:2:2, 10bit, PAL) (Approx.): 50p (50 Mbps), 25p (50 Mbps)* details of frame rate

MOVIE RECORDING SYSTEM (XAVC S-I 4K)

3840 x 2160 (4:2:2, 10bit, NTSC) (Approx.): 60p (600 Mbps), 30p (300 Mbps), 24p (240 Mbps); 3840 x 2160 (4:2:2, 10bit, PAL) (Approx.): 50p (500 Mbps), 25p (250 Mbps)* details of frame rate

MOVIE RECORDING SYSTEM (XAVC S-I HD)

1920 x 1080 (4:2:2, 10bit, NTSC) (Approx.): 60p (222 Mbps), 30p (111 Mbps), 24p (89 Mbps); 1920 x 1080 (4:2:2, 10bit, PAL) (Approx.): 50p (185 Mbps), 25p (93 Mbps)* details of frame rate

Recording System

Location information Link from smartphone

Yes

Media

SD memory card, SDHC memory card (UHS-I/II-compliant), SDXC memory card (UHS-I/II-compliant), CFexpress Type A memory card

Memory Card Slot

SLOT1: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card, SLOT2: Multi slot for SD (UHS-I/II-compliant) memory card/CFexpress Type A card

Recording mode on 2 memory cards

Simult. Rec, Sort, Auto Switch Media, Copy

Shutter

Electronic Front Curtain Shutter

Yes (ON/OFF)

Flash Sync. Speed

1/250 sec.

SHUTTER SPEED

Still images: 1/8000 to 30 s, Bulb, Movies: 1/8000 to 1/4 (1/3 steps), up to 1/60 in AUTO mode (up to 1/30 in Auto slow shutter mode)

Shutter Type

Mechanical shutter/Electronic shutter

Silent Shooting

Yes (ON/OFF)

type

Electronically controlled, vertical-traverse, focal-plane type

Size & Weight

Dimensions (W x H x D)

Approx. 5 1/8 x 3 7/8 x 3 1/4 inches, Approx. 5 1/8 x 3 7/8 x 2 3/4 inches (FROM GRIP TO MONITOR), Approx. 128.9 mm x 96.9 mm x 80.8 mm, Approx. 128.9 mm x 96.9 mm x 69.7 mm (FROM GRIP TO MONITOR)

Weight (with battery and memory card included)

Approx. 1 lb 8.7 oz, Approx. 699 g

Viewfinder

Diopter adjustment

-4.0 to +3.0 m⁻¹

Viewfinder Type

1.6 cm (0.64 type) electronic viewfinder (color)

Eye Point

Approx. 1 inch from the eyepiece lens, 1 inch from the eyepiece frame at -1m⁻¹ (CIPA standard)

Field Coverage

100%

Magnification

Approx. 0.90x (with 50-mm lens at infinity, -1m⁻¹)

Finder Frame Rate Selection

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

Number of Dots

9 437 184 dots

Display Function

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

White Balance

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)

Custom function

type

Custom key settings, Programmable Setting (Body 3 sets / memory card 4 sets), My Dial Settings, My Menu, Reg Cust Shoot Set

Image Stabilization

type

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

Compensation Effect

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

Lens Compensation

Setting

Peripheral Shading, Chromatic Aberration, Distortion

Other Features

Clear Image Zoom

Still images: Approx. 2x, Movies: Approx. 1.5x (4K), Approx. 2x (HD)

Digital Zoom

Smart zoom (Still images): 35-mm full frame: M: Approx. 1.5x, S: Approx. 2x, APS-C: M: Approx. 1.3x, S: Approx. 2x, Digital zoom (Still images): 35-mm 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): 35-mm full frame: Approx. 4x, APS-C: Approx. 4x

Face Detection

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

Others

Interval Recording, ISO AUTO Min. SS, Bright Monitoring, Copyright Info, Set File Name, Save/Import Settings, Help guide, Video Light Mode, Zoom Ring Rotate

PlayMemories Camera Apps™

-

Self-Portrait Self-Timer

-

[Print](#)

Compatible Standards

Exif Print, Print Image Matching III

[Others](#)

Operating Temperature

32 - 104 degrees F / 0 - 40 degrees C

[Audio](#)

Microphone

Built-in, stereo

Speaker

Built-in, monaural

[Interface](#)

Bluetooth®

Yes (Bluetooth Standard Ver. 5.0 [2.4 GHz band])

Multi Interface Shoe

Yes (with Digital Audio Interface)

Headphone Terminal

Yes (3.5 mm Stereo minijack)

Mic Terminal

Yes (3.5 mm Stereo minijack)

Multi/Micro USB terminal

Yes, Type-C® Terminal (SuperSpeed USB 5 Gbps [USB 3.2] compatible)

PC Interface

Mass-storage / MTP

Sync terminal

-

Vertical Grip Connector

Yes

LAN Terminal

-

Functions

FTP Transfer Func., View on Smartphone, Remote control via Smartphone, NFC One-touch remote, PC Remote, BRAVIA Sync (Control for HDMI), PhotoTV HD

Playback**Modes**

Single (with or without shooting information Y RGB histogram & highlight / shadow warning), Index view, Enlarged display mode (L: 10.6x, M: 6.92x, S: 5.32x), Auto Review, Image orientation, Folder selection (Date / Still / Movie), Protect, Rating, Display as Group

Photo Capture

Yes

Power

USB Power Supply

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

Supplied Battery

One rechargeable battery pack NP-FZ100

Battery Life (Movie, actual recording)

Approx. 80 min (Viewfinder)/Approx. 95 min (LCD monitor) (CIPA standard)

Battery Life (Movie, continuous recording)

Approx. 130 min (Viewfinder) / Approx. 135 min (LCD monitor) (CIPA standard)

Battery Life (Still Images)

Approx. 510 shots (Viewfinder) / Approx. 600 shots (LCD monitor) (CIPA standard)

Internal Battery Charge

Yes (Available with USB Type-C Terminal. USB Power Delivery-compatible)

Power consumption with LCD screen

Still images: Approx. 3.3 W (with FE 28–70-mm F3.5-5.6 OSS lens attached), Movies: Approx. 7.3 W (with FE 28–70-mm F3.5-5.6 OSS lens attached)

Power consumption with Viewfinder

Still images: Approx. 4.3 W (with FE 28–70-mm F3.5-5.6 OSS lens attached), Movies: Approx. 7.6 W (with FE 28–70-mm F3.5-5.6 OSS lens attached)

What's In The Box

SUPPLIED ACCESSORIES

Camera body: ILCE7SM3/B, Rechargeable Battery: NP-FZ100, Battery Charger: BC-QZ1, Power cord, Cable protector, Shoulder strap, Body cap, Accessory shoe cap, Eyepiece cup, USB-A to USB-C cable (USB 3.2)