



Clifton Cameras Product Specification

Sony a9ii Full Specifications

Lens

Lens Compatibility

Sony E-mount lenses

Lens Mount

E-mount

Image Sensor

Aspect Ratio

3:2

Number Of Pixels (Effective)

Approx. 24.2 megapixels

Number of Pixels (total)

Approx. 28.3 megapixels

Sensor Type

35mm full frame (35.6×23.8mm), Exmor RS CMOS sensor

Anti-Dust System

Charge protection coating on optical filter and image sensor shift mechanism



Recording (still images)

Recording Format

JPEG (DCF Ver. 2.0, Exif Ver.2.31, 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 Size (pixels) [Sweep Panorama]

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Image Quality Modes

RAW, RAW & JPEG (Extra fine, Fine, Standard), JPEG (Extra fine, Fine, Standard)

Picture Effect

8 types: Posterization (Color), Posterization (B/W), Pop Color, Retro Photo, Partial Color (R/G/B/Y), High Contrast Monochrome, Toy Camera (Normal/Cool/Warm/Green/Magenta), Soft High-key, 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), (Contrast (-3 to +3 steps), Saturation (-3 to +3 steps), Sharpness (-5 to +5 steps))

Picture Profile

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Dynamic Range Functions

Off, Dynamic Range Optimizer (Auto/Level (1-5)), Auto High Dynamic Range (Auto Exposure Difference, Exposure Difference Level (1-6 EV, 1.0 EV step))

Colour Space

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

14bit RAW

Yes

Uncompressed RAW

Yes

Recording (movie)

Recording Format

XAVC S, AVCHD format Ver. 2.0 compliant

Video Compression

XAVC S: MPEG-4 AVC/H.264, AVCHD: MPEG-4 AVC/H.264

Audio Recording Format

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

Colour Space

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

Picture Effect

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

Creative Style

Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn leaves, Black & White, Sepia, Style Box(1-6), (Contrast (-3 to +3 steps), Saturation (-3 to +3 steps), Sharpness (-5 to +5 steps))

Picture Profile



Image Size (Pixels), NTSC

XAVC S 4K: 3840 x 2160 (30p, 100M), 3840 x 2160 (24p, 100M), 3840 x 2160 (30p, 60M), 3840 x 2160 (24p, 60M), XAVC S HD: 1920 x 1080 (120p, 100M), 1920 x 1080 (120p, 60M), 1920 x 1080 (60p, 50M), 1920 x 1080 (30p, 50M), 1920 x 1080 (24p, 50M), 1920 x 1080 (60p, 25M), 1920 x 1080 (30p, 16M), AVCHD:1920 x 1080 (60i, 24M, FX), 1920 x 1080 (60i, 17M, FH)

Image Size (pixels), PAL

XAVC S 4K: 3840 x 2160 (25p, 100M), 3840 x 2160 (25p, 60M), AVCHD: 1920 x 1080 (50i, 24M, FX), 1920 x 1080 (50i, 17M, FH)

SLOW & QUICK MOTION (SHOOTING FRAME RATE)

NTSC mode: 1fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps, PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps,

SLOW & QUICK MOTION (RECORDING FRAME RATE & IMAGE SIZE)

NTSC mode: 1920x1080 (60p, 30p, 24p), PAL mode: 1920x1080 (50p, 25p)

Movie Functions

Audio Level Display, Audio Rec Level, Proxy Recording (1280 x 720(Approx.9Mbps)), TC/UB (TC Preset/UB Preset/TC Format/TC Run/TC Make/UB Time Rec), Auto Slow Shutter, REC Control, Clean HDMI Info. (ON/OFF selectable)

HDMI Output

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

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), microSD memory card, microSDHC memory card, microSDXC memory card



Memory Card Slot

SLOT1: Slot for SD (UHS-I/II compliant) memory card, SLOT2: Slot for SD (UHS-I/II compliant) memory card

Recording mode on 2 memory cards

Simult. Rec (Still), Simult. Rec (Movie), Simult. Rec (Still/Movie), Sort (JPEG/RAW), Sort (Still/Movie), Auto Switch Media (On/Off), Copy

Noise Reduction

Noise Reduction

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

Multi Frame NR

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White Balance

White Balance Modes

Auto / Daylight / Shade / Cloudy / Incandescent / Fluorescent (Warm White / Cool White / Day White / Daylight) / Flash / Underwater/ Color Temperature (2500 to 9900K) & color filter (G7 to M7 (57-step), A7 to B7 (29-step)) / Custom

AWB Micro Adjustment

Yes (G7 to M7, 57-step)(A7 to B7, 29-step)

Priority Set in AWB

Yes

SHUTTER AWB LOCK

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



Bracketing

3 frames, H/L selectable

Focus

Focus Type

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

Focus Sensor

Exmor RS CMOS sensor

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)

Focus Sensitivity Range

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

Focus Mode

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

Focus Area

Wide (693 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)

Other Features

Eye-start AF (only with LA-EA2 or LA-EA4 attached (Sold separately)), Tracking, [Still images] Human (Right/Left Eye Select) / Animal, [Movie] Human (Right/Left Eye Select), AF micro adjustment with LA-EA2 or LA-EA4 (Sold separately) , Predictive control, Focus lock, Swt.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 attached)



Focus type with LA-EA3 (Sold separately)

phase-detection

Exposure

Metering Type

1200-zone evaluative metering

Metering Sensor

Exmor RS CMOS sensor

Metering Sensitivity

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

Metering Mode

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

Exposure Compensation

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

Exposure Bracketing

Bracket: Cont., Bracket: Single, 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, or 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, or 1.0 EV increments.

AE Lock

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

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))

ISO Sensitivity (Recommended Exposure Index)

[Still images] Mechanical Shutter: 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), Electronic Shutter: ISO 100-25600 (ISO numbers up from ISO 50 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.

Yes2

Scene Selection

-

Viewfinder

Viewfinder Type

1.3 cm (0.5 type) electronic viewfinder (color), Quad-VGA OLED

Number of Dots

3 686 400 dots

Brightness Control (Viewfinder)

Auto/Manual (5 steps between -2 and +2)

Color Temperature Control

Manual (5 steps)

Field Coverage

100%

Magnification

approx. 0.78 x (with 50mm lens at infinity, -1m-1)

Dioptre Adjustment

-4.0 to +3.0m-1

Eye Point

Approx. 23mm from the eyepiece lens, 18.5mm from the eyepiece frame at -1m-1 (CIPA standard)



Finder Frame Rate Selection

STD 60fps / HI 120fps

Display Contents

Graphic Display, Display All Info., No Disp. Info., Digital Level Gauge, Histogram

LCD Screen

Monitor Type

7.5cm (3.0-type) type TFT

Number of Dots

1,440,000 dots

Touch Panel

Yes

Brightness Control

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

Adjustable Angle

Up by approx. 107 degrees, Down by approx. 41 degrees

Display Selector (Finder/LCD)

Yes (Auto/Manual)

Real-time Image Adjustment Display (LCD)

On/Off

Quick Navi

Yes

Focus Magnifier

Yes (35mm full frame: 4.7x, 9.4x, APS-C: 3.1x, 6.2x)



Zebra

Yes (selectable level + range or lower limit as custom setting)

Peaking MF

Yes (Level setting: High/Mid/Low/Off, Color: Red/Yellow/Blue/White)

Others

WhiteMagic, Grid Line (Rule of 3rds Grid/Square Grid/Diag. + Square Grid/Off), Movie Marker (Center/Aspect/Safety Zone/Guideframe)

Display Content

Graphic Display, Display All Info, No Disp. Info, Digital Level Gauge, Histogram, For viewfinder, Monitor Off

Other Features

PlayMemories Camera Apps™

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Clear Image Zoom

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

Digital Zoom

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

Face Detection

Modes:Face Priority in AF(On/Off), Face Priority in Multi Metering(On/Off), Regist. Faces Priority(On/Off), Face registration, Max. number of detectable: 8 faces

Self-Portrait Self-timer

-

Others



Interval Recording, Touch Focus: Yes (Touch Focus/Touch Pad/Touch Tracking), ISO AUTO Min. SS, Bright Monitoring, Copyright Info, Set File Name, FTP Transfer Func., Help guide, Area Setting, Shop Front Mode, Video Light Mode, Zoom Ring Rotate

Eye-Fi ready

-

Shutter

Type

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

Shutter Type

Auto/Mechanical shutter/Electronic shutter

Shutter Speed

[Still images, Single shot]3 Mechanical Shutter: 1/8000 to 30 sec, Bulb, AUTO: 1/32000 to 30 sec, Bulb, Electronic Shutter: 1/32000 to 30 sec, [Still images, Continuous shooting]3 Mechanical Shutter: 1/8000 to 30 sec, AUTO: 1/32000 to 1/8 sec, Electronic Shutter: 1/32000 to 1/8 sec, [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)

Flash Sync. Speed

1/250 sec.4

Electronic Front Curtain Shutter

Yes (ON/OFF)

Silent Shooting

Yes (Electronic Shutter)

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.)

Flash Control

Type

-

Guide No.

-

Flash coverage

-

Control

Pre-flash TTL5

Flash Compensation

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

Flash Bracketing

3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, 1.0 EV increments.

Flash Modes

Flash off, Autoflash, Fill-flash, Slow Sync., Rear Sync., Red-eye reduction (on/off selectable), Wireless6, Hi-speed sync.6

External Flash Compatibility

Sony α 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

Drive Modes

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

Continuous Drive Speed (approx. max.)

AUTO/Electronic Shutter: Continuous shooting: Hi: max. 20 fps, Mid: max. 10fps, Lo: max. 5 fps 789, Mechanical Shutter: Continuous shooting: Hi: max. 10 fps, Mid: max. 8fps, Lo: max. 3 fps10

No. of recordable frames (approx.)

JPEG Extra fine L: 361 frames, JPEG Fine L: 361 frames, JPEG Standard L: 361 frames, RAW: 239 frames, RAW&JPG: 226 frames, RAW(Uncompressed): 131 frames, RAW(Uncompressed)&JPG: 120 frames10

Self-Timer

10 sec. delay/5 sec. delay/2 sec. delay/Continuous self-timer (3 frames after 10 sec. delay/5 frames after 10 sec. delay/3 frames after 5 sec. delay/5 frames after 5 sec. delay/3 frames after 2 sec. delay/5 frames after 2 sec. delay)/Bracketing self-timer (Off/2 sec. delay/5 sec. delay/10sec. delay)

Playback

Photo Capture

Yes

Modes

Single (with or without shooting information Y RGB histogram & highlight/shadow warning), 9/25-frame index view, Enlarged display mode (L: 15.0x, M: 9.84x, S: 7.52x), Auto Review (10/5/2 sec,Off), Image orientation



(Auto/Manual/Off selectable), Slideshow, Folder selection (Date/ Still/ MP4/ AVCHD/XAVC S HD/XAVC S 4K), Forward/Rewind (movie), Delete, Protect, Rating, Display as Group, Voice Memo

Interface

PC Interface

Mass-storage, MTP, PC remote

Multi / Micro USB Terminal

Yes¹¹

NFC™

Yes (NFC forum Type 3 Tag compatible), One-touch remote, One-touch sharing

Wireless LAN (Built-In)

Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac (2.4GHz band/5GHz band)1213, View on Smartphone, Remote control via Smartphone, Send to Computer, View on TV

Bluetooth

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

HD Output

HDMI micro connector (Type-D), BRAVIA Sync (Control for HDMI), PhotoTV HD, 4K movie output/4K still image PB

Multi Interface Shoe

Yes (with Digital Audio Interface)¹⁴

Auto-lock Accessory Shoe

-

Smart Accessory Terminal 2

-

Mic Terminal



Yes (3.5 mm Stereo minijack)

DC IN Terminal

-

Sync Terminal

Yes

Headphone Terminal

Yes (3.5 mm Stereo minijack)

Vertical Grip Connector

Yes

PC Remote

Yes

LAN Terminal

Yes (1000BASE-T)

Audio

Microphone

Built-in, stereo

Speaker

Built-in, monaural

Print

Compatible Standards

Exif Print, Print Image Matching III, DPOF setting



Custom function

Type

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

Lens Compensation

Setting

Peripheral Shading, Chromatic Aberration, Distortion

Power

Supplied Battery

One rechargeable battery pack NP-FZ100

Battery Life (Still Images)

Approx. 500 shots (Viewfinder) / approx. 690 shots (LCD monitor) (CIPA standard)¹⁵

Battery Life (Movie, actual recording)

Approx. 110 min (Viewfinder) / Approx. 120 min (LCD monitor) (CIPA standard)¹⁶

Battery Life (Movie, continuous recording)

Approx. 195 min (Viewfinder) / Approx. 200 min (LCD monitor) (CIPA standard)

Internal Battery Charge

Yes (Available with Multi/Micro USB Terminal or USB Type-C Terminal)

External Power



Power consumption with Viewfinder

Still images: approx. 3.9W (with FE 28-70mm F3.5-5.6 OSS lens attached), Movies: approx 5.0W (with FE 28-70mm F3.5-5.6 OSS lens attached)

Power consumption with LCD screen

Still images: approx. 2.9W (with FE 28-70mm F3.5-5.6 OSS lens attached), Movies: approx 4.9W (with FE 28-70mm F3.5-5.6 OSS lens attached)

USB Power supply

Yes (Available with Multi/Micro USB Terminal or USB Type-C Terminal)

Others

Operating Temperature

32 - 104 degrees F / 0 - 40 degrees C

Size & Weight

Weight (with battery and memory card included)

Approx. 678 g / approx. 1 lb 8.0 oz

Dimensions (W x H x D)

Approx. 128.9mm x 96.4mm x 77.5mm, Approx. 128.9mm x 96.4mm x 67.3mm (from grip to monitor)/Approx. 5 1/8 x 3 7/8 x 3 1/8 inches, Approx. 5 1/8 x 3 7/8 x 2 3/4 inches (from grip to monitor)

What's In The Box

Power cord



Rechargeable Battery NP-FZ100

Cable Protector

Battery Charger BC-QZ1

Shoulder strap

Body cap

Accessory shoe cap

Eyepiece cup

USB Type-C(TM) cable

Placeholder