



a7CR
ILCE-7CR



Main Specification

<p>TYPE 35mm full frame (35.6 x 23.8mm), Exmor R CMOS sensor</p> <p>ISO SENSITIVITY (RECOMMENDED EXPOSURE INDEX) Still images: ISO 100-51200 (ISO numbers up from 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)</p> <p>WITH BATTERY AND MEMORY CARD INCLUDED Approx. 509 g</p>	<p>NUMBER OF PIXELS (EFFECTIVE) Approx. 24.2 megapixels</p> <p>STILL IMAGES Approx. 680 shots (Viewfinder) / approx. 740 shots (LCD monitor) (CIPA standard)</p> <p>DIMENSIONS (W X H X D) Approx. 124.0mm x 71.1mm x 59.7mm, Approx. 124.0mm x 71.1mm x 53.5mm (FROM GRIP TO MONITOR)</p>
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Full Specification

General

<p>CAMERA TYPE Interchangeable lens digital camera</p>	<p>LENS MOUNT E-mount</p>
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Image sensor

<p>TYPE 35mm full frame (35.6 x 23.8mm), Exmor R CMOS sensor</p> <p>NUMBER OF PIXELS (TOTAL) Approx. 25.3 megapixels</p> <p>COLOR FILTER R, G, B primary color</p>	<p>NUMBER OF PIXELS (EFFECTIVE) Approx. 24.2 megapixels</p> <p>IMAGE SENSOR ASPECT RATIO 3:2</p> <p>ANTI-DUST FUNCTION Yes (Charge protection coating on optical filter and image sensor shift mechanism)</p>
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Recording system (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 SIZE (PIXELS) [SWEEP PANORAMA]

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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)

CREATIVE LOOK

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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

Recording system (movie)

RECORDING FORMAT

XAVC S

VIDEO COMPRESSION

XAVC S: MPEG-4 AVC/H.264

AUDIO RECORDING FORMAT

XAVC S: LPCM 2ch

PICTURE EFFECT

7 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

CREATIVE STYLE

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

CREATIVE LOOK

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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

COLOR SPACE

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

Movie recording system (XAVC HS 8K)

7680 X 4320 (4:2:0, 10BIT, NTSC) (APPROX.)

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7680 X 4320 (4:2:0, 10BIT, PAL) (APPROX.)

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Movie recording system (XAVC HS 4K)

3840 X 2160 (4:2:0, 10BIT, NTSC) (APPROX.)

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3840 X 2160 (4:2:0, 10BIT, PAL) (APPROX.)

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3840 X 2160 (4:2:2, 10BIT, NTSC) (APPROX.)

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3840 X 2160 (4:2:2, 10BIT, PAL) (APPROX.)

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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)

3840 X 2160 (4:2:2, 10BIT, NTSC) (APPROX.)

3840 X 2160 (4:2:2, 10BIT, PAL) (APPROX.)

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Movie recording system (XAVC S HD)

1920 X 1080 (4:2:2, 10BIT, NTSC) (APPROX.)

1920 X 1080 (4:2:2, 10BIT, PAL) (APPROX.)

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1920 X 1080 (4:2:0, 8BIT, NTSC) (APPROX.)
120p (100Mbps / 60Mbps)

1920 X 1080 (4:2:0, 8BIT, PAL) (APPROX.)
100p (100Mbps / 60Mbps)

1920 X 1080 (4:2:0, 8BIT, NTSC) (APPROX.)
60p (50Mbps / 25Mbps)

1920 X 1080 (4:2:0, 8BIT, PAL) (APPROX.)
50p (50Mbps / 25Mbps)

1920 X 1080 (4:2:0, 8BIT, NTSC) (APPROX.)
30p (50Mbps / 16Mbps)

1920 X 1080 (4:2:0, 8BIT, PAL) (APPROX.)
25p (50Mbps / 16Mbps)

1920 X 1080 (4:2:0, 8BIT, NTSC) (APPROX.)
24p (50Mbps)

Movie recording system (XAVC S-I 4K)

3840 X 2160 (4:2:2, 10BIT, NTSC) (APPROX.)

3840 X 2160 (4:2:2, 10BIT, PAL) (APPROX.)

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Movie recording system (XAVC S-I HD)

1920 X 1080 (4:2:2, 10BIT, NTSC) (APPROX.)

1920 X 1080 (4:2:2, 10BIT, PAL) (APPROX.)

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Movie recording system (AVCHD)

1920 X 1080 (4:2:0, 8BIT, NTSC)

1920 X 1080 (4:2:0, 8BIT, PAL)

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Slow & Quick Motion (S&Q)

IMAGE FRAME RATE

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

Movie function

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

RAW OUTPUT

-

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)

MEMORY CARD SLOT

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

RECORDING MODE ON 2 MEMORY CARDS

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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 SENSOR

Exmor R 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)

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

Exposure control

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))

SCENE SELECTION

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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 EXPOSURE 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

100%

MAGNIFICATION

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

DIOPTR ADJUSTMENT

-4.0 to +3.0m⁻¹

EYE POINT

Approx. 20mm from the eyepiece lens, 17.5mm from the eyepiece frame at -1m⁻¹ (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 deg., Rotation Angle: Approx. 270 deg.

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

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

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.,
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

With compatible Sony external flash
1/160 sec.

ELECTRONIC FRONT SHUTTER CURTAIN

Yes

SILENT SHOOTING

Yes (ON/OFF)

SteadyShot INSIDE (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.)

MODE

On / Off

Flash

TYPE

-

GUIDE NO.

-

FLASH COVERAGE

-

CONTROL

Pre-flash TTL

A flash cannot be used when [Shutter Type] is set to [Electronic Shutter].

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.

With compatible external flash

RECYCLING TIME

-

EXTERNAL FLASH

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+/Hi/Mid/Lo selectable) Self-timer Self-timer (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

PIXEL SHIFT MULTI SHOOTING

-

SPEED (APPROX., MAX.)

Varies according to shooting conditions or memory card used

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

NO. OF FRAME RECORDABLE* (APPROX.)

Varies according to shooting conditions or memory card used

JPEG Extra fine L: over 215 frames JPEG Fine L: over 223 frames JPEG Standard L: over 223 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

Interface

PC INTERFACE

Mass-storage / MTP

MULTI / MICRO USB TERMINAL

Supports Micro USB compatible device.

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USB TYPE-C® TERMINAL

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

NFC

Yes (NFC forum Type 3 Tag compatible)

SYNC. TERMINAL

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WIRELESS LAN(BUILT-IN)

Yes (Wi-Fi Compatible, IEEE 802.11a/b/g/n/ac (2.4GHz band/5GHz band))
(Configuration method/Access method)WPS or manually /infrastructure mode. When connecting to smartphones, the camera can always work as a base without a wireless access point. (Security: WEP/WPA-PSK/WPA2-PSK)
Models sold in some countries/regions support IEEE 802.11b/g/n (2.4GHz) wireless LAN only.

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

Sony accessories for the Accessory Shoe can be attached.

Yes (with Digital Audio Interface)

MIC TERMINAL

Yes (3.5 mm Stereo minijack)

HEADPHONE TERMINAL

Yes (3.5 mm Stereo minijack)

WIRED

-

REMOTE CONTROL (WIRELESS)

Yes (Bluetooth remote control)

VERTICAL GRIP CONNECTOR

-

LAN TERMINAL

-

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

Audio

MICROPHONE

Built-in, stereo

SPEAKER

Built-in, monaural

Print

COMPATIBLE STANDARDS

Exif Print, Print Image Matching III, DPOF setting

Custom function

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

LENS COMPENSATION

Peripheral Shading, Chromatic Aberration, Distortion

Power

BATTERY

One rechargeable battery pack NP-FZ100

STILL IMAGES

The LCD screen is turned on, shot once every 30 seconds, operate zoom alternately between W and T ends, flash strobe once every two times, turn power off and on once every ten times.

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

MOVIES (ACTUAL RECORDING)

Indication recording time, which is defined by repeating the cycle: Power on, start recording, zoom, stand-by and power off.

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

EXTERNAL POWER (AC ADAPTOR)

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Power consumption

WITH VIEWFINDER

Still images: approx. 2.9W (with FE 28-60mm F4-5.6 OSS lens attached), Movies: approx. 4.5W (with FE 28-60mm F4-5.6 OSS lens attached)

WITH LCD SCREEN

Still images: approx. 2.7W (with FE 28-60mm F4-5.6 OSS lens attached), Movies: approx. 4.6W (with FE 28-60mm F4-5.6 OSS lens attached)

Weight

WITH BATTERY AND MEMORY CARD INCLUDED

Approx. 509 g

OZ. WITH BATTERY AND MEMORY CARD INCLUDED

Approx. 1lb 2.0 oz

BODY ONLY

Approx. 424 g

OZ BODY ONLY

Approx. 0 lb 15.0 oz

Dimensions

DIMENSIONS (W X H X D)

Approx. 124.0mm x 71.1mm x 59.7mm, Approx. 124.0mm x 71.1mm x 53.5mm (FROM GRIP TO MONITOR)

INCHES. DIMENSIONS (W X H X D)

Approx. 5 x 2 7/8 x 2 3/8 inches, Approx. 5 x 2 7/8 x 2 1/8 inches (FROM GRIP TO MONITOR)

Operating Temperature

OPERATING TEMPERATURE

32 - 104 degrees F / 0 - 40 degrees C

Supplied Accessory

KIT LENS

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SUPPLIED ACCESSORY

Rechargeable Battery NP-FZ100 AC adaptor Shoulder strap Body cap Accessory shoe cap USB-A to USB-C cable (USB 3.2)