# **Effective pixels**

### **Effective pixels**

20.3 million

(Image processing may reduce the number of effective pixels.)

# **Image sensor**

Image sensor

1/2.3-in. type CMOS

Total pixels: approx. 21.14 million

### Lens

#### Lens

NIKKOR lens with 35x optical zoom

### Focal length

4.3-151 mm (angle of view equivalent to that of 24–840 mm lens in 35mm [135] format)

f/-number

f/3.4-6.9

#### Construction

13 elements in 11 groups (4 ED lens elements)

# **Digital zoom magnification**

### **Digital zoom magnification**

Up to 4x (angle of view equivalent to that of approx. 3360 mm lens in 35mm [135] format)

### Vibration reduction

Vibration reduction

Lens shift and electronic VR (movies)

# **Autofocus (AF)**

**Autofocus** 

Contrast-detect AF

### Focus range

[W]: Approx. 50 cm (1 ft 8 in.)-∞ [T]: Approx. 2 m (6 ft 7 in.)-∞

Macro mode: Approx. 1 cm (0.4 in.)-∞ (wide-angle position) (All distances measured from center of front surface of lens)

Focus-area selection

Face priority, center, manual with 99 focus areas, subject tracking, target finding AF, touch AF

### **Monitor**

**Monitor** 

7.5 cm (3 in.),approx. 921 kdot TFT LCD (RGBW) with antireflection coating, and 6level brightness adjustment

Frame coverage (shooting mode)

Approx. 98% horizontal and vertical (compared to actual picture)

Frame coverage (playback mode)

Approx. 100% horizontal and vertical (compared to actual picture)

## **Storage**

Media

SD, SDHC, SDXC

File system

DCF and Exif 2.3 compliant

File formats

Still images: JPEG

Movies: MP4 (Video: H.264/MPEG-4 AVC, Audio: AAC stereo)

# Image size (pixels)

### Image size (pixels)

- 20M (High) [5184 x 3888★]
- 20M [5184 x 3888]
- 8M [3648 x 2736]
- 4M [2272 x 1704]
- 2M [1600 x 1200]
- VGA [640 x 480]
- 16:9 15M [5184 x 2920]
- 1:1 [3888 x 3888]

ISO sensitivity (Standard output sensitivity)

ISO 80-1600

# **Exposure**

### **Metering mode**

Matrix, center-weighted (digital zoom less than 2x), spot (digital zoom 2x or more)

### **Exposure control**

Programmed auto exposure and exposure compensation (–2.0–+2.0 EV in steps of 1/3 EV)

## **Shutter**

#### Shutter

Mechanical and CMOS electronic shutter

### **Speed**

1/2000-1 s

- 1/2000–8 s (when ISO sensitivity is fixed at ISO 80, 100 or 200 in S, A, or M mode)
- 1/4000 s (maximum speed during high-speed continuous shooting)
- 4 s (Fireworks show scene mode)
- 25 s (Star trails of Multiple exp. Lighten scene mode)

#### Self-timer

Can be selected from 10 s, 5 s and 2 s

# **Aperture**

#### **Aperture**

Electronically-controlled 3-blade iris diaphragm

### Range

7 steps of 1/6 EV (W) (A, M mode)

## **Flash**

Range (approx.) (ISO sensitivity: Auto)

[W]: 0.5–6.0 m (1 ft 8 in.–19 ft) [T]: 1.5–3.0 m (4 ft 12 in. –9 ft 10 in.)

Flash control

TTL auto flash with monitor preflashes

## Interface

**USB** connector

Micro-USB connector, Hi-Speed USB
Do not use any USB cable other than the UC-E21 for Micro-USB connector.
Supports Direct Print (PictBridge)

**HDMI** output connector

HDMI micro connector (Type D)

# Wi-Fi (Wireless LAN)

**Standards** 

IEEE 802.11b/g (standard wireless LAN protocol)

**Operating frequency** 

2412-2462 MHz (1-11 channels)

**Authentication** 

OPEN/WPA2-PSK

**Access protocols** 

Infrastructure

### **Bluetooth**

**Communication protocols** 

Bluetooth Specification Version 4.1

# **Supported languages**

Supported languages

Arabic, Bengali, Bulgarian, Chinese (Simplified and Traditional), Czech, Danish, Dutch, English, Finnish, French, German, Greek, Hindi, Hungarian, Indonesian, Italian, Japanese, Korean, Marathi, Norwegian, Persian, Polish, Portuguese (European and Brazilian), Romanian, Russian, Serbian, Spanish, Swedish, Tamil, Telugu, Thai, Turkish, Ukrainian, Vietnamese

### **Power sources**

**Power sources** 

One Rechargeable Li-ion Battery EN-EL12 (included) AC Adapter EH-62F (available separately)

**Charging time** 

Approx. 2 h 20 min (when using Charging AC Adapter EH-71P and when no charge remains)

## Battery life\*1

Still images

Approx. 270 shots when using EN-EL12

Movie recording (actual battery life for recording)\*2

Approx. 50 min (1080/30p) when using EN-EL12

## **Tripod socket**

**Tripod socket** 

1/4 (ISO 1222)

# **Dimensions / weight**

**Dimensions (WxHxD)** 

Approx. 113.0 x 66.5 x 39.9 mm ( 4.5 x 2.7 x 1.6 in.) (excluding projections)

Weight

Approx. 299 g ( 10.6 oz ) (including battery and memory card)

# **Operating environment**

**Temperature** 

0°C-40°C (32°F-104°F)

Humidity

## Supplied accessories<sup>\*3</sup>

### Supplied accessories

Rechargeable Li-ion Battery EN-EL12, Charging AC Adapter EH-71P\*, USB Cable UC-E21, Camera Strap

A plug adapter is included if the camera was purchased in a country or region that requires a plug adapter. The shape of the plug adapter varies with the country or region of purchase.

Unless otherwise stated, all figures assume a fully-charged battery and an ambient temperature of 23 ±3°C (73.4 ±5.4°F) as specified by the Camera and Imaging Products Association (CIPA).

<sup>\*1</sup> Battery life does not reflect the use of SnapBridge and may vary with the conditions of use, including temperature, the interval between shots, and the length of time that menus and images are displayed. \*2 Individual movie files cannot exceed 2 GB in size or 29 minutes in length. Recording may end before this limit is reached if camera temperature becomes elevated.

<sup>\*3</sup> Supplied accessories may differ by country or area.