Canon

# EOS R7

| | |
|---|---|
| **Type** | |
| **Type** | Digital single-lens non-reflex AF/AE camera |
| **Image Processor** | DIGIC X |
| **Recording Media** | SD card<br>• SD card speed class-compatible.<br>• Compatible with UHS-II<br>• Eye-Fi cards and Multimedia cards (MMC) are not supported. |
| **Compatible Lenses** | Canon RF-S/RF lens group (excluding EF, EF-S and EF-M lenses)<br>When using Mount Adapter EF-EOS R: Canon EF or EF-S lenses (excluding EF-M lenses) |
| **Lens Mount** | Canon RF mount |
| **Image Sensor** | |
| **Type** | CMOS sensor (compatible with Dual Pixel CMOS AF) |
| **Effective Pixels** | Approx. 32.5 megapixels |
| **Sensor Size** | Approx. 22.3 x 14.8 mm |
| **Pixel Size** | Approx. 3.2 µm square |
| **Total Pixels** | Approx. 34.4 megapixels |
| **Aspect Ratio** | 3:2 (Horizontal: Vertical) |
| **Color Filter System** | RGB primary color filters |
| **Low Pass Filter** | Installed in front of the image sensor, non-detachable |
| **Dust Deletion Feature** | (1) Self Cleaning Sensor Unit<br>• Removes dust adhering to the low-pass filter.<br>• At power off only / Enable / Disable. Performed automatically (taking about approx. 2 sec. as indicated on the screen) or manually (taking about approx. 7 sec. as indicated on the screen).<br>• After manually activated cleaning, the camera will automatically restart (Power OFF to ON).<br>• When [Multi Shot Noise Reduction], [Multiple exposures], or [HDR mode] is set, [Clean now] and [Clean manually] cannot be selected.<br>(2) Dust Delete Data acquisition and appending<br>• The coordinates of the dust adhering to the low-pass filter are detected by a test shot and appended to subsequent images.<br>• The dust coordinate data appended to the image is used by the EOS Canon Digital Professional Software to automatically erase the dust spots.<br>• Not available in focus bracketing, RAW burst mode, or multiple-exposure shooting.<br>(3) Manual cleaning (by hand) |

| Recording System | |
|---|---|
| **Recording Format** | Compliant to Design rule for Camera File system 2.0 and Exif 2.31*.<br>*Supports time difference information. |
| **Image Format** | Still: JPEG, HEIF, RAW, Dual Pixel RAW, Raw Burst, C-RAW (CR3);<br>Movies: ALL-I*, IPB, IPB Light<br>* Time-lapse movies only |
| **HDR Mode-<br>Continuous Shooting** | (1) 1 shot only<br>(2) Every shot |
| **Advanced shooting operations** | (1) Focus Bracketing<br>(2) Interval Timer<br>(3) Bulb Timer<br>(4) Multi-Shot NR |
| **Image Quality** | **3:2 Aspect Ratio**<br>Large/HEIF/RAW: 6960 x 4640<br>Medium: 4800 x 3200<br>Small 1: 3472 x 2320*<br>Small 2: 2400 x 1600<br><br>**4:3 Aspect Ratio**<br>Large: 6160 x 4640*<br>Medium: 4256 x 3200*<br>Small 1: 3072 x 2320*<br>Small 2: 2112 x 1600*<br>RAW: 6960 x 4640<br><br>**16:9 Aspect Ratio**<br>Large: 6960 x 3904*<br>Medium: 4800 x 2688*<br>Small 1: 3472 x 1952*<br>Small 2: 2400 x 1344*<br>RAW: 6960 x 4640<br><br>**1:1 Aspect Ratio**<br>Large: 4640 x 4640<br>Medium: 3200 x 3200<br>Small 1: 2320 x 2320<br>Small 2: 1600 x 1600<br>RAW: 6960 x 4640<br><br>• Values for Recording Pixels are rounded to the nearest 100,000th.<br>• RAW/C-RAW images are generated at 3:2, with information added about the specified aspect ratio, and JPEG images are generated at the specified aspect ratio.<br>• These aspect ratios (M / S1 / S2) and pixel counts also apply to resizing.<br>* Indicate an inexact proportion. |
| **File Numbering** | The following file numbers can be set:<br>File numbering methods<br>a. Continuous numbering<br>i. The numbering of captured images continues even after you replace the card.<br>b. Auto reset<br>i. When you replace the card, the numbering will be reset to start from 0001. If the new SD card already contains images, the numbering will continue from the last recorded image in the card. |
| **RAW + JPEG / HEIF Simultaneous Recording** | Simultaneous recording of any combination of RAW/C-RAW and JPEG/HEIF image-recording quality is supported. |

| | |
|---|---|
| **Color Space** | Selectable between sRGB and Adobe RGB |
| **Picture Style** | (1) Auto<br>(2) Standard<br>(3) Portrait<br>(4) Landscape<br>(5) Fine Detail<br>(6) Neutral<br>(7) Faithful<br>(8) Monochrome<br>(9) User Defined 1–3 |
| **White Balance** | |
| **Settings** | (1) Auto (Ambience priority/White priority)<br>(2) Daylight<br>(3) Shade<br>(4) Cloudy[1]<br>(5) Tungsten light<br>(6) White fluorescent light<br>(7) Flash<br>(8) Custom[2] (Custom WB)<br>(9) Color temperature<br><br>[1] Effective also in twilight and sunset.<br>[2] Setting method options include [Custom White Balance] and [Shoot to set WB]. |
| **Auto White Balance** | Option between ambience priority and white priority settings. |
| **White Balance Shift** | Blue/amber bias: ±9 levels<br>Magenta/green bias: ±9 levels<br>• Corrected in reference to the current WB mode's color temperature.<br>• Blue/amber and magenta/green shift can be set at the same time. |
| **Viewfinder** | |
| **Type** | OLED color electronic viewfinder; approx. 2.36 million dots resolution |
| **Coverage** | Approx. 100% vertically and horizontally relative to the shooting image area (with image quality L, at approx. 22mm eyepoint). |
| **Magnification / Angle of View** | Approx. 1.15x / Approx. 33 degrees (with 3:2 display, an 50mm lens at infinity, -1 $m^{-1}$) |
| **Eye Point** | Approx. 22mm (at -1 $m^{-1}$ from the eyepiece lens end) |
| **Dioptric Adjustment Range** | Approx. -4.0 to + 2.0 $m^{-1}$ (dpt) |
| **Autofocus** | |
| **Focus Method** | Dual Pixel CMOS AF |
| **Number of AF zones available for Automatic Selection** | AF area: Horizontal: Approx. 100% x Vertical: Approx. 100%*<br>Stills: Max. 651 zones (31 x 21)<br>Movies: Max. 527 zones (31 x 17) |
| **AF Working Range** | EV -5 to 20 (f/1.2 lens*, center AF point, One-Shot AF, at room temperature, ISO 100)<br>* Except RF lenses with a Defocus Smoothing (DS) coating. |
| **Focusing brightness range (in movie recording)** | Full HD 29.97fps : EV -3.5 to 20<br>With an f/1.2 lens*, center AF point, One-Shot AF,at room temperature, ISO 100<br>* Except RF lenses with a Defocus Smoothing (DS) coating. |

<table>
<tr><td>AF Methods</td><td>
<table>
<tr><th>AF Method</th></tr>
<tr><td>Whole area AF</td></tr>
<tr><td>Spot AF</td></tr>
<tr><td>1-point AF</td></tr>
<tr><td>Expand AF Area<br>(Above, below, left and right, around)</td></tr>
<tr><td>Expand AF Area: Around</td></tr>
<tr><td>Flexible Zone AF 1,2,3</td></tr>
</table>
</td></tr>
<tr><td>Subject to Detect</td><td>People, Animals, Vehicles, No Priority<br>• Available with [AF Area] set to Whole area AF</td></tr>
<tr><td>Focus mode switch</td><td>AF / MF<br>• Applies when an RF or RF-S lens without a focus mode switch is attached.<br>• When lenses with a focus mode switch are attached, the setting on the lens takes precedence.</td></tr>
<tr><td colspan="2">Exposure Control</td></tr>
<tr><td>Metering Modes</td><td>Real-time metering with image sensor (384 zones [24x16 zone metering])<br>(1) Evaluative metering<br>(2) Partial metering (approx. 6.0% of the area at the center of the screen)<br>(3) Spot metering (approx. 3.0% of the area at the center of the screen)<br>(4) Center-weighted average metering</td></tr>
<tr><td>Metering Range</td><td>Still Photo Shooting : EV -2 to 20 (at room temperature, ISO 100)<br>Movie Recording: EV 0 to 20 (at room temperature, ISO 100)</td></tr>
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| | | | | |
|---|---|---|---|---|
| **Exposure Control Modes** | **Mode dial** | | **Shooting mode** | |
| | | | **Still photo shooting**<br>**Power switch: On** | **Movie recording**<br>**Power switch: Movie** |
| | **Basic Zone** | **A+** | Scene Intelligent Auto | Scene Intelligent Auto movies |
| | | **SCN** | Special scene<br>• Portrait<br>• Group photo<br>• Landscape<br>• Panoramic shot<br>• Sports<br>• Kids<br>• Panning<br>• Close-up<br>• Food<br>• Night Portrait<br>• Handheld Night Scene<br>• HDR Backlight Control<br>• Silent shutter | • HDR movies |
| | | **Creative filters** | Creative filters<br>• Grainy B/W<br>• Soft focus<br>• Fish-eye effect<br>• Water painting effect<br>• Toy camera effect<br>• Miniature effect<br>• HDR art standard<br>• HDR art vivid<br>• HDR art bold<br>• HDR art embossed | • Dream<br>• Old Movies<br>• Memory<br>• Dramatic B&W<br>• Miniature effect movie |
| | **Creative Zone** | **Fv** | Flexible-priority AE | Movie auto exposure |
| | | **P** | Program AE | Movie auto exposure |
| | | **Tv** | Shutter-priority AE | Movie shutter-priority auto exposure |
| | | **Av** | Aperture-priority AE | Movie aperture-priority auto exposure |
| | | **M** | Manual exposure | Movie manual exposure |
| | | **B** | Bulb exposure | Movie auto exposure |
| | **Custom Shooting Modes** | **C1, C2, C3** | Custom shooting | Custom shooting |

## ISO Speed Range

### Available ISO speeds; user-set

| | |
|---|---|
| **Normal** | ISO 100–32000 (in 1/3- or 1-stop increments) |
| **Expanded** | H (equivalent to ISO 51200) |

- For [Highlight tone priority], the settable ISO speed range will be ISO 200 to 32000.
- Expanded ISO cannot be set for HDR mode or during HDR PQ shooting.

### User-defined ISO range - still photo shooting

| ISO Speed Range | ISO speed |
|---|---|
| **Minimum** | L 100 – 32000 (in 1-stop increments) |
| **Maximum** | ISO 200 – H (51200) (in 1-stop increments) |

* Expanded ISO speeds are noted as being “equivalent” to these speeds.

### User-defined Auto ISO range - still photo shooting

| Auto Range | ISO speed |
|---|---|
| **Minimum** | ISO 100–25600 (in 1-stop increments) |
| **Maximum** | ISO 200–32000 (in 1-stop increments) |

### ISO Auto details in still photo shooting

| Shooting mode | | No Flash | Using Flash | |
|---|---|---|---|---|
| Variable control of maximum ISO Auto limit for E-TTL | | | Compatible lens | Incompatible lens |
| Creative Zone | P | ISO 100*1*2–32000*2 | ISO 100*1*2–6400*2 | ISO 100*1*2–1600*2 |
| | TV | | | |
| | AV | | | |
| | M | | | |
| | B | ISO 400*3 | ISO 400*3 | ISO 400*3 |
| Basic Zone | A+ | ISO 100–6400 | ISO 100–6400 | ISO 100–1600 |
| | SCN | Varies by shooting mode | | |
| | Creative Filters | Varies by shooting mode | | |

* 1: ISO 200 when [Highlight tone priority] is set to [Enable] or [Enhanced].
* 2: Varies depending on [Maximum] and [Minimum] of [Auto range].
* 3: If outside the setting range, changed to the value most close to ISO 400.

## Exposure Compensation

| | Photo | Movie |
|---|---|---|
| **Manual** | ±3 stops in 1/3- or 1/2-stop increments | |
| **AEB** | ±3 stops in 1/3- or 1/2-stop increments | |

## AE Lock

(1) Auto AE lock
- The metering mode for AE lock after one-shot focus can be customized.

(2) User-applied AE lock
- In the Fv, P, Tv, Av and M modes, enabled with the AE lock button. (Press again to update.)
- Enabled in all metering modes.

## Shutter

**Type**

(1) Mechanical
(2) Electronic 1st-Curtain
(3) Electronic Shutter (1st and 2nd curtain - silent*)
* Cannot be used in conjunction with the following functions: flash photography, HDR shooting, multiple exposures, Multi Shot Noise Reduction, AEB, HDR PQ, anti-flicker shooting, Dual Pixel RAW shooting, Digital Lens Optimizer [High].
* A shutter release sound is not generated. However, note that the sounds other than the shutter release sound (aperture, focusing lens drive sound/electronic sound, etc.) may be generated.
* In electronic shutter shooting under conditions such as flash firing by other cameras or with fluorescent lighting or other flickering light sources, a strip of light or banding due to the brightness difference may be recorded in the image.

**Shutter Speeds**

When [Mechanical] or [Elec. 1st- curtain] is set: 1/8000-30 sec, bulb
When [Electronic] is set: 1/16000-30 sec.

**X-sync Speed**

Mechanical Shutter: 1/250 sec.
Elec. 1st-curtain: 1/320 sec.

**Shutter Release**

Soft-touch electromagnetic release

**Self Timer**

10-sec. delay, 2-sec. delay

**Shutter Lag Time**

| | Mechanical Shutter | Electronic 1st curtain | Electronic shutter |
|---|---|---|---|
| Shutter-release time lag *Measured with shutter button pressed fully from half-pressed position | Approx. 99 ms | Approx. 50 ms | Approx. 50 ms |

Based on Canon testing standards.

## Image Stabilization (IS mode)

**Still Photo IS**

In-body IS operation can be selected when using a non-IS lens.
- Always on
- Only for shot

**5-axis Image Stabilization with RF/RF-S, EF/EF-S lenses**

| Lens | | | | Lens IS | | IBIS | | | 5-axis Stabilization |
|---|---|---|---|---|---|---|---|---|---|
| Lens Mount | Lens IS Support | | | Pitch/ YAW | X/Y | Pitch/ YAW | X/Y | Roll | |
| RF/RF-S | IS Lens | Yes Hybrid IS | Photo | Yes*1 | Yes | Yes*1 | | Yes | Yes |
| | | | Movie | Yes*1 | | Yes*1 | Yes | Yes | |
| | | No Hybrid IS | Photo | Yes*1 | | Yes*1 | Yes | Yes | |
| | | | Movie | Yes*1 | | Yes*1 | Yes | Yes | |
| | Non IS Lens | | Photo | | | Yes | Yes | Yes | |
| | | | Movie | | | Yes | Yes | Yes | |
| EF/EF/S | IS Lens | Yes Hybrid IS | Photo | Yes | Yes | | | Yes | Yes |
| | | | Movie | Yes | | | Yes | Yes | |
| | | No Hybrid IS | Photo | Yes | | | Yes | Yes | |
| | | | Movie | Yes | | | Yes | Yes | |
| | Non IS Lens | | Photo | | | Yes | Yes | Yes | |
| | | | Movie | | | Yes | Yes | Yes | |

- Y/P: Correction of angular camera shake (yaw/pitch); X/Y: Correction of shift- shake; Roll: Correction of roll shake.
- May not enable suitable coverage of the available stabilization area.
- *1: Coordinated control of lens optical IS and camera in-body IS

**EOS R7 coordinated In-Body Image Stabilizer Still Shooting performance with RF & RF-S lenses**

| Lens | Coordinated Control IS | Focal Length | IS stop (CIPA Standard) |
|---|---|---|---|
| RF14-35mm F4 L IS USM | Yes | 35mm | 7 |
| RF-S18-45mm F4.5-6.3 IS STM | Yes | 45mm | 6.5 |
| RF-S18-150mm F3.5-6.3 IS STM | Yes | 150mm | 7 |
| RF24-105mm F4L IS USM | Yes | 105mm | 8 |
| RF24-105mm F4-7.1 IS STM | Yes | 105mm | 8 |
| RF24-240mm F4-6.3 IS USM | Yes | 240mm | 6.5 |
| RF70-200mm F2.8 L IS USM | Yes | 200mm | 7.5 |
| RF70-200mm F4 L IS USM | Yes | 200mm | 7.5 |
| RF100-400mm F5.6-8 IS USM | Yes | 400mm | 6 |
| RF100-500mm F4.5-7.1 L IS USM | Yes | 500mm | 6 |
| RF35mm F1.8 MACRO IS STM | Yes | 35mm | 7 |
| RF100mm F2.8L MACRO IS USM | Yes | 100mm | 8 |
| RF16mm F2.8 STM | - | 16mm | 6 |
| RF50mm F1.8 STM | - | 50mm | 7 |

## External Speedlite

| | |
|---|---|
| **E-TTL balance** | Ambience priority, standard, flash priority |
| **Compatible E-TTL Speedlites** | Canon EX- and EL-series Speedlites |
| **E-TTL II Flash Metering** | (1) Evaluative (Face Priority)<br>(2) Evaluative<br>(3) Average |

**Slow Sync (P/Av modes)**

| Mechanical Shutter | Electronic 1st curtain |
|---|---|
| 1/250–30 sec. auto | 1/320–30 sec. auto |
| 1/250–1/60 sec. auto | 1/320–1/60 sec. auto |
| 1/250 sec. (fixed) | 1/320 sec. (fixed) |

| | |
|---|---|
| **Flash Function Menu** | Provided for EX- and EL-series Speedlites |
| **Flash Exposure Compensation** | ±3 stops in 1/3- or 1/2-stop increments |
| **Continuous flash control** | 1. E-TTL each shot<br>2. E-TTL 1st shot |

## Drive System

**Drive Modes and Continuous Shooting Speed**

| Drive Modes | AF Operation | Mechanical Shutter | Electronic 1st curtain | Electronic shutter |
|---|---|---|---|---|
| Single Shooting | | Yes | Yes | Yes |
| High-speed Continuous shooting + | One-Shot AF | Max. approx. 15 shots/sec.*1,6,8 | Max. approx. 15 shots/sec.*1,6,8 | Max. approx. 30 shots/sec.*3,8 |
| | Servo AF | | | |
| High-speed Continuous shooting | One-Shot AF | Max. approx. 6.5 shots/sec.*5,6,8 | Max. approx. 8.0 shots/sec.*4,5,6,8 | Max. approx. 15 shots/sec.*2,8 |
| | Servo AF | | | |
| Low-speed Continuous Shooting | One-Shot AF | Max. approx. 3.0 shots/sec.*5,6 | Max. approx. 3.0 shots/sec.*7 | Max. approx. 3.0 shots/sec.*8 |
| | Servo AF | | | |
| Self-timer:10 sec / remote control | | Yes | Yes | Yes |
| Self-timer:2 sec / remote control | | Yes | Yes | Yes |
| Self-timer: Continuous | | Yes | Yes | Yes |

*1: AE, flash metering, and WB do not change after the first shot in flash photography.
*2: Note that maximum continuous shooting speed is slower when certain lenses are attached and AF operation is set to Servo AF.
*3: Certain lenses support up to 30 shots/sec. Note that maximum continuous shooting speed is slower when other lenses are attached and AF operation is set to Servo AF.
*4: Certain lenses support up to 8 shots/sec. Note that maximum continuous shooting speed is slower when specific lenses AF operation is set to Servo AF.
*5: Continuous shooting speed is slower during flash photography (flash metering control: determined for each shot).
*6: Continuous shooting speed is slower with anti-flicker shooting.
*7: Continuous shooting speed is slower in flash photography with anti-flicker shooting.
*8: Not available when set to [Dual Pixel RAW: Enable].

**Still photo file size / Number of possible shots / Maximum burst for continuous shooting**

**Still Shooting with Mechanical Shutter or electronic 1st-curtain shutter, shot at approx. 15 fps**

| | Image Quality | Mechanical shutter / Electronic 1st-curtain Approx. 15 shots/sec. | | Electronic shutter Approx. 30 shots/sec. | |
|---|---|---|---|---|---|
| | | SD Card (UHS-I)*1 | SD Card [High-speed] (UHS-II)*2 | SD Card (UHS-I)*1 | SD Card [High-speed] (UHS-II)*2 |
| JPEG*3 | L (fine) | 184 | 224 | 117 | 126 |
| HEIF*4 | L (fine) | 184 | 190 | 117 | 122 |
| RAW*3 | RAW | 46 | 51 | 41 | 42 |
| | C-RAW | 105 | 187 | 87 | 93 |
| RAW+JPEG*3 | RAW + L (fine) | 46 | 51 | 41 | 42 |
| | C-RAW + L (fine) | 105 | 187 | 87 | 93 |
| RAW+HEIF*4 | RAW + L (fine) | 46 | 51 | 41 | 41 |
| | C-RAW + L (fine) | 101 | 109 | 84 | 93 |

* Maximum burst as measured under conditions conforming to Canon testing standards (High-speed continuous shooting + in One-Shot AF mode, ISO 100, and Standard Picture Style).
* Number of shots available varies depending on shooting conditions (including aspect ratio, subject, memory card brand, ISO speed, Picture Style, and Custom Function).

*1: When using a 32 GB UHS-I card that conforms to Canon testing standards.
*2: When using a 32 GB UHS-II card that conforms to Canon testing standards.
*3: When set to [HDR shooting (HDR PQ): Disable].
*4: When set to [HDR shooting (HDR PQ): Enable].

## HDR Shooting and Movie Recording

**HDR PQ Shooting**

Disable / Enable

* Can be used in conjunction with Auto Lighting Optimizer.

**HDR PQ Shooting - Still**

| Recording format | Bit depth | Color sampling method | HDR specification |
|---|---|---|---|
| HEIF | 10 bit | YCbCr 4:2:2 | Rec. ITU-R BT.2100 (PQ) |

**HDR PQ Shooting - Movie**

| Recording format | Bit depth | Color sampling method | HDR specification |
|---|---|---|---|
| MP4 | 10 bit | YCbCr 4:2:2 | Rec. ITU-R BT.2100 (PQ) |

## Video Shooting

**Focusing**

Dual Pixel CMOS AF II

**Exposure Compensation**

±3 stops in 1/3- or 1/2-stop increments

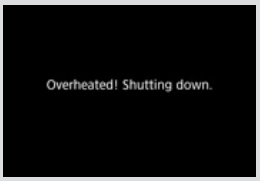
**Canon Log**

Canon Log 3

## Temperature Warning

The camera warns of rising internal temperatures by means of icons and indicators.

| Status | Still photo image quality warning | Early warning | Intermediate | Late warning |
|---|---|---|---|---|
| Display | | | | |
| Definition | Blinking icon displayed. Still image quality declines (lower S/N ratio) as the image sensor heats up | Icon and indicator display starts. First stage of temperature warnings | Indicator level rises | Icon turns red and starts blinking. Indicator level becomes max. Less shooting time available status. |

| | |
|---|---|
|  | If the maximum internal temperature is reached, this guidance is displayed, and the camera automatically stops (power off state). |

## Estimated Camera Recovery Time

Estimated recovery times are indicated below. These are affected by various factors such as ambient temperature, continued camera operation and the selected shooting resolution. The time until full record time is available, will vary with ambient temperature.

| Resolution and Frame Rate | Waiting Period (73°F / 23°C) | Approximate Maximum Recording Time after Waiting Period (minutes) |
|---|---|---|
| **4K Fine 29.97p** | 5 min | Max. approx. 30 min. |

* Less continuous recording time is available if the camera cools down with Live View display active (without recording) than if it cools down while turned off.

**Movie Recording Format**

### Standard Movie Recording

| Canon Log | | OFF | | ON (Canon Log 3) |
|---|---|---|---|---|
| **HDR PQ** | | **OFF** | **ON** | **OFF** |
| **Container format** | | MP4 | | |
| **Bit depth** | | 8 bit | 10 bit | 10 bit |
| **Compression** | | H.264 / MPEG-4 AVC | H.265 / HEVC | H.265 / HEVC |
| **Video signal recording range** | | Full range (0-255) | Full range (0-1023) | Full range (128-1020) |
| **Color sampling method** | | YCbCr 4:2:0 | YCbCr 4:2:2 | YCbCr 4:2:2 |
| **Color Gamut** | | Rec.ITU-R BT.709 | Rec.ITU-R BT.2020 | Rec.ITU-R BT.709/ BT.2020/ Cinema Gamut |
| **Audio** | **IPB** | AAC (Audio compression: Enable)<br>Linear PCM Audio compression: Diable | | |
| | **IPB (light)** | AAC | | |

### Movie recording size overview

| | Resolution | Frame rate | | Digital Zoom | Video Compression | Audio Compression |
|---|---|---|---|---|---|---|
| | | **NTSC** | **PAL** | | | |
| **4K UHD Fine**[*1] | 3840 × 2160 | 29.97<br>23.98 | 25.00 | | IPB (Standard)<br>IPB (Light) | AAC<br>Linear PCM |
| **4K UHD** | | 59.94<br>29.97<br>23.98 | 50.00<br>25.00 | | | |
| **4K UHD Crop** | | 59.94 | 50.00 | | | |
| **Time-lapse movies 4K UHD** | | 29.97[*2] | 25.00[*2] | | All-I | |
| **High Frame Rate** | 1920 × 1080 | 119.88[*3] | 100.00[*3] | | IPB (Standard)<br>IPB (Light) | |
| **Full HD** | | 59.94 | 50.00 | | | AAC<br>Linear PCM |
| | | 29.97<br>23.98 | 25.00 | Approx.<br>1X - 10X | | |
| **Time-lapse movies Full HD** | | 29.97[*2] | 25.00[*2] | | All-I | |
| **HDR movies** | | 29.97 | 25.00 | | IPB Standard | AAC[*4] |
| **Creative filters** | | 29.97<br>23.98 | 25.00 | | IPB (Standard)<br>IPB (Light) | |

* Audio compression is restricted to [AAC] in Basic Zone modes.

* Only [AAC] is available for audio compression of IPB (Light).

*1: Generated from 7K oversampling.

*2: Playback frame rate.

*3: Recording frame rate.

*4: No audio is recorded for Miniature effect movies.

## Estimated Recording Time and Data

**Canon Log: Off, HDR PQ: Off**

| Video Recording Size | | | Theoretical Recording Time (approx.) | | | Bit Rate/File Size (approx.) |
|---|---|---|---|---|---|---|
| | | | 32 GB | 128 GB | 512 GB | |
| 4K UHD Fine | 29.97<br>23.98 | IPB | 35 min. | 2 hr. 21 min. | 9 hr. 27 min. | 120 Mbps<br>860 MB/min. |
| | | IPB (Light) | 1 hr. 10 min. | 4 hr. 43 min. | 18 hr. 52 min. | 60 Mbps<br>431 MB/min. |
| 4K UHD | 59.94 | IPB | 18 min. | 1 hr. 14 min. | 4 hr. 56 min. | 230 Mbps<br>1647 MB/min. |
| | | IPB (Light) | 35 min. | 2 hr. 21 min. | 9 hr. 27 min. | 120 Mbps<br>860 MB/min. |
| | 29.97<br>23.98 | IPB | 35 min. | 2 hr. 21 min. | 9 hr. 27 min. | 120 Mbps<br>860 MB/min. |
| | | IPB (Light) | 1 hr. 10 min. | 4 hr. 43 min. | 18 hr. 52 min. | 60 Mbps<br>431 MB/min. |
| 4K UHD Crop | 59.94 | IPB | 18 min. | 1 hr. 14 min. | 4 hr. 56 min. | 230 Mbps<br>1647 MB/min. |
| | | IPB (Light) | 35 min. | 2 hr. 21 min. | 9 hr. 27 min. | 120 Mbps<br>860 MB/min. |
| 4K UHD (Time-lapse movie) | 29.97 | ALL-I | 9 min. | 36 min. | 2 hr. 25 min. | 470 Mbps<br>3362 MB/min. |
| Full HD (High Frame Rate movie) | 119.88 | IPB | 35 min. | 2 hr. 22 min. | 9 hr. 28 min. | 120 Mbps<br>858 MB/min. |
| | | IPB (Light) | 1 hr. 0 min. | 4 hr. 3 min. | 16 hr. 15 min. | 70 Mbps<br>501 MB/min. |
| Full HD | 59.94 | IPB | 1 hr. 10 min. | 4 hr. 43 min. | 18 hr. 52 min. | 60Mbps<br>431 MB/min. |
| | | IPB (Light) | 2 hr. 0 min. | 8 hr. 3 min. | 32 hr. 15 min. | 35 Mbps<br>252 MB/min. |
| | 29.97<br>23.98 | IPB | 2 hr. 20 min. | 9 hr. 23 min. | 37 hr. 35 min. | 30 Mbps<br>216 MB/min. |
| | | IPB (Light) | 5 hr. 47 min. | 23 hr. 11 min. | 92 hr. 47 min. | 12 Mbps<br>88 MB/min. |
| Full HD (Time-lapse movie) | 29.97 | ALL-I | 47 min. | 3 hr. 9 min. | 12 hr. 38 min. | 90 Mbps<br>644 MB/min. |

- **Bit rate only applies to video output, not audio or metadata.**
- **When audio data is set to [C.Fn 4-2 Audio compression: Enable] (audio: AAC recording).**
- **Movie recording stops when the maximum recording time per movie is reached.**
- **Sound is not recorded for approx. the last two frames when the compression method for movie recording quality is IPB (Standard) and the camera is set to [C.Fn 4-2 Audio compression: Enable] or IPB (Light) (audio: AAC). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.**

**Estimated Recording Time and Data**

**Canon Log: On, HDR PQ: On**

| Video Recording Size | | | Theoretical Recording Time (approx.) | | | Bit Rate/File Size (approx.) |
|---|---|---|---|---|---|---|
| | | | 32 GB | 128 GB | 512 GB | |
| 4K UHD Fine | 29.97 23.98 | IPB | 25 min. | 1 hr. 40 min. | 6 hr. 40 min. | 170 Mbps 1218 MB/min. |
| | | IPB (Light) | 50 min. | 3 hr. 20 min. | 13 hr. 20 min. | 85 Mbps 610 MB/min. |
| 4K UHD | 59.94 | IPB | 12 min. | 50 min. | 3 hr. 20 min. | 340 Mbps 2434 MB/min. |
| | | IPB (Light) | 25 min. | 1 hr. 40 min. | 6 hr. 40 min. | 170 Mbps 1218 MB/min. |
| | 29.97 23.98 | IPB | 25 min. | 1 hr. 40 min. | 6 hr. 40 min. | 170 Mbps 1218 MB/min. |
| | | IPB (Light) | 50 min. | 3 hr. 20 min. | 13 hr. 20 min. | 85 Mbps 610 MB/min. |
| 4K UHD Crop | 59.94 | IPB | 12 min. | 50 min. | 3 hr. 20 min. | 340 Mbps 2434 MB/min. |
| | | IPB (Light) | 25 min. | 1 hr. 40 min. | 6 hr. 40 min. | 170 Mbps 1218 MB/min. |
| 4K UHD (Time-lapse movie) | 29.97 | ALL-I | 9 min. | 36 min. | 2 hr. 25 min. | 470 Mbps 3362 MB/min. |
| Full HD (High Frame Rate movie) | 119.88 | IPB | 23 min. | 1 hr. 34 min. | 6 hr. 19 min. | 180 Mbps 1287 MB/min. |
| | | IPB (Light) | 42 min. | 2 hr. 50 min. | 11 hr. 22 min. | 100 Mbps 715 MB/min. |
| Full HD | 59.94 | IPB | 47 min. | 3 hr. 9 min. | 12 hr. 36 min. | 90Mbps 646 MB/min. |
| | | IPB (Light) | 1 hr. 24 min.. | 5 hr. 39 min. | 22 hr. 38 min. | 50 Mbps 360 MB/min. |
| | 29.97 23.98 | IPB | 1 hr. 34 min. | 6 hr. 17 min. | 25 hr. 8 min. | 45 Mbps 324 MB/min. |
| | | IPB (Light) | 2 hr. 30 min. | 10 hr. 3 min. | 40 hr. 15 min. | 28 Mbps 202 MB/min. |
| Full HD (Time-lapse movie) | 29.97 | ALL-I | 31 min. | 2 hr. 6 min. | 8 hr. 25 min. | 135 Mbps 966 MB/min. |

- **Bit rate only applies to video output, not audio or metadata.**
- **When audio data is set to [C.Fn 4-2 Audio compression: Enable] (audio: AAC recording).**
- **Movie recording stops when the maximum recording time per movie is reached.**
- **Sound is not recorded for approx. the last two frames when the compression method for movie recording quality is IPB (Standard) and the camera is set to [C.Fn 4-2 Audio compression: Enable] or IPB (Light) (audio: AAC). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.**

<table>
<tr><td></td><td></td></tr>
<tr><td colspan="2">LCD Screen</td></tr>
<tr><td>Type</td><td>TFT color, liquid-crystal monitor</td></tr>
<tr><td>Monitor Size</td><td>3.0-inch (screen aspect ratio of 3:2)</td></tr>
<tr><td>Dots</td><td>Approx. 1.62 million dots</td></tr>
<tr><td>Coverage</td><td>Approx. 100% vertically/horizontally</td></tr>
<tr><td>Brightness Control</td><td>Manually adjustable to one of seven brightness levels</td></tr>
<tr><td>Coating</td><td>• Anti-smudge coating applied.<br>• Anti-reflection coating not applied.</td></tr>
<tr><td>Interface Languages</td><td>29 (English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Ukraine, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Vietnamese, Hindi, Romanian, Turkish, Arabic, Thai, Simplified/Traditional Chinese, Korean, Malay, Indonesian, Japanese)</td></tr>
<tr><td colspan="2">Playback</td></tr>
<tr><td>Display Format</td><td>
<table>
<tr><th>Item</th><th>Still Photo</th><th>Movie</th></tr>
<tr><td>Magnify zoom display</td><td>1.5x–10x (5 levels)</td><td>-</td></tr>
<tr><td>AF point display</td><td>Yes</td><td>-</td></tr>
<tr><td>Grid display</td><td>Off / 3×3 / 6×4 / 3×3+diag</td><td>-</td></tr>
<tr><td>Rating</td><td colspan="2">OFF / 1 to 5 Stars<br>Select images / Select range / All images in folder / All images on card / All found images</td></tr>
<tr><td>Image Search</td><td colspan="2">Search conditions<br>Rating / Date / Folder / Protect / Type of file</td></tr>
<tr><td>Protect</td><td colspan="2">Select images / Select range / All images in folder / Unprotect all images in folder / All images on card / Unprotect all images on card / All found images / Unprotect all found images</td></tr>
<tr><td>Cloud RAW image processing</td><td>Supported</td><td>-</td></tr>
<tr><td>RAW image processing</td><td>Supported</td><td></td></tr>
<tr><td>RAW Burst processing</td><td>Supported</td><td></td></tr>
<tr><td>HEIF -> JPEG Conversion</td><td>Supported</td><td>-</td></tr>
<tr><td>Cropping</td><td>Supported</td><td>-</td></tr>
</table>
</td></tr>
</table>

<table>
<tr><td>Highlight Alert</td><td>The white areas with no image data will blink.</td></tr>
<tr><td>Histogram</td><td>Brightness and RGB</td></tr>
<tr><td colspan="2">Quick Control Function</td></tr>
<tr><td>Function</td><td>The Quick Control screen is accessed by pressing the Quick Control button during still photo shooting.</td></tr>
<tr><td colspan="2">Image Protection and Erase</td></tr>
<tr><td>Protection</td><td>(1) Single image (select image)<br>(2) Select range<br>(3) All images in a folder<br>(4) All images on card<br>• Image browsing and image search can be based on ratings.<br>• Ratings-based image selections also possible with DPP.<br>(5) All found images (only during image search)</td></tr>
<tr><td>Erase</td><td>Except protected images<br>(1) Select images to erase<br>(2) Select range<br>(3) All images in folder<br>(4) All images on card<br>(5) All fo)und images (only during image search)</td></tr>
<tr><td colspan="2">Direct Printing</td></tr>
<tr><td>Compatible Printers</td><td>Not supported</td></tr>
<tr><td colspan="2">DPOF: Digital Print Order Format</td></tr>
<tr><td>DPOF</td><td>Compliant to DPOF Version 1.1</td></tr>
<tr><td colspan="2">Wi-Fi®</td></tr>
<tr><td>Standards Compliance</td><td>IEEE 802.11b/g/n</td></tr>
<tr><td>Transmission Method</td><td>DS-SS modulation (IEEE 802.11b)<br>OFDM modulation (IEEE 802.11g/n)</td></tr>
<tr><td>Transition Frequency (Central Frequency)</td><td>2.4 GHz band<br>Frequency: 2412 to 2462 MHz<br>Channels: 1 to 11 channels</td></tr>
<tr><td>Security</td><td>
<table>
<tr><th rowspan="2">Connection Method</th><th rowspan="2">Authentication</th><th colspan="2">Encryption</th></tr>
<tr><th>Encryption</th><th>Key Format and Length</th></tr>
<tr><td rowspan="2">Camera Access Point</td><td>WPA2/ WPA3-Personal</td><td>AES</td><td>• ASCII 8 characters</td></tr>
<tr><td>Open</td><td colspan="2">Disable</td></tr>
<tr><td rowspan="4">Infrastructure</td><td rowspan="2">Open</td><td rowspan="2">WEP</td><td>• Hexadecimal 10 digits<br>• Hexadecimal 26 digits<br>• ASCII 5 characters<br>• ASCII 13 characters</td></tr>
<tr><td colspan="2">Disable</td></tr>
<tr><td>Shared key</td><td>WEP</td><td>Same as WEP above</td></tr>
<tr><td>WPA-PSK<br>WPA2-PSK<br>WPA3-Personal</td><td>TKIP<br>AES</td><td>1-127 characters</td></tr>
</table>
</td></tr>
<tr><td>Communication with a Smartphone</td><td>Images can be viewed, controlled, and received using a smartphone.<br>Remote control of the camera using a smartphone is possible depending on the Camera Connect specifications.<br>Images can be sent to a smartphone.<br>Firmware can be downloaded and saved to a card in the camera using Camera Connect.</td></tr>
</table>

| | |
|---|---|
| **Remote Operation Using EOS Utility** | The camera can be controlled via Wi-Fi® using EOS Utility. |
| **Print from Wi-Fi® Printers** | Supported |
| **Send Images to a Web Service** | Still photos (RAW, C-RAW, HEIF, and JPEG) and movies (MP4) can be uploaded to image.canon server album.<br>With the image.canon server, images can be sent to social media or a photo album link can be sent (by the image.canon specifications). |
| **Cloud RAW Image Processing via image.canon** **(firmware 1.1.0 or higher)** | Still RAW photos can be transferred to image.canon for RAW development using Deep Learning technology resulting in clearer images without losing detail through the reduction of noise, false color, moiré and jagged lines.<br><br>*This feature requires a paid subscription (service begins July 25, 2022). |
| **Bluetooth®** | |
| **Standards Compliance** | Bluetooth Specification Version 4.2 compliant (Bluetooth low energy technology) |
| **Transmission Method** | GFSK modulation |
| **Customization** | |
| **Custom Functions** | |

| | Still photo | Movie |
|---|---|---|
| **Shutter button (half-press)** | Yes | - |
| **Movie shooting button** | Yes | - |
| **Multi-function (<M-Fn>) button** | Yes | Yes |
| **ISO speed button** | Yes | Yes |
| **AF-ON button** | Yes | Yes |
| **AE lock (<*>) button** | Yes | Yes |
| **AF point button** | Yes | Yes |
| **DOF preview button** | Yes | Yes |
| **Lens function (<L-Fn>) button** | Yes | Yes |
| **Cross keys: Up button** | Yes | Yes |
| **Cross keys: Left button** | Yes | Yes |
| **Cross keys: Right button** | Yes | Yes |
| **Cross keys: Down button** | Yes | Yes |
| **Set button** | Yes | Yes |
| **Multi-controllers** | Yes | Yes |

<table>
<tr><td>Custom Dials</td><td>Customizable Dials<table><tr><td>Main dial</td></tr><tr><td>Quick control dial</td></tr><tr><td>Control ring</td></tr></table></td></tr>
<tr><td>My Menu Registration</td><td>• Up to six top-tier menu items and Custom Functions can be registered.<br>• Up to five My Menu tabs can be added.<table><tr><td>My Menu tab overall operations</td><td>• Adding a tab<br>• Deleting tabs in a batch<br>• Deleting all tab items<br>• Setting the menu display</td></tr><tr><td>My Menu tab detailed operations</td><td>• Selecting a registered item<br>• Sorting registered items<br>• Deleting selected registered items<br>• Deleting registered items in a batch<br>• Deleting tabs<br>• Changing a tab name (16 ASCII characters)</td></tr></table></td></tr>
<tr><td colspan="2">Interface</td></tr>
<tr><td>USB Terminal</td><td>Equivalent to Superspeed PLus USB (USB 3.2 Gen 2)<br>• For PC communication<br>• Terminal type: USB Type-C<br>• Shared with terminal for in-camera charging with USB Power Adapter PD-E1.<br>•In-camera Charging: Equivalent to USB type-C (5 V/1.5 A), but use should be restricted to USB Power Adapter PD-E1.</td></tr>
<tr><td>Video Out Terminal</td><td>HDMI micro OUT terminal Type D (Resolution switches automatically) / CEC not compatible<br>• Images can be displayed through the HDMI output and on screen at the same time.<br>• Images will not be displayed unless [NTSC] or [PAL] is properly set according to the video system of the TV set.</td></tr>
<tr><td>Clean HDMI output</td><td>Provided</td></tr>
<tr><td>Microphone input terminal</td><td>3.5mm diameter stereo mini jack</td></tr>
</table>

| | |
|---|---|
| **Headphone terminal** | 3.5mm diameter stereo mini jack |
| **Remote control terminal** | Remote Switch RS-60E3 type terminal supported |
| Wireless remote control | • Compatible with the Wireless Remote Control BR-E1<br>• Compatible with infrared remote controls such as Remote Controller RC-6 |
| Multi-function shoe | Supported |
| **Power Source** | |
| **Battery** | LP-E6NH/LP-E6N/LP-E6*<br>• With the AC Adapter AC-E6N + DC Coupler DR-E6, AC power is possible.<br>• With the USB Power Adapter PD-E1, in-camera charging of LP-E6NH is possible. |
| **Battery Check** | Automatic battery check when the power switch is turned ON.<br>Displayed in 6 levels on top LCD panel.<br>• Battery level can be checked on the LCD panel and in the viewfinder.<br>Battery Info display in Set-up Menu:<br>•Type of power source used.<br>•Remaining capacity (percentage of battery charge remaining).<br>•Recharge performance: (3-level display of battery's ability to hold a charge) |
| **Start-up Time** | Approx. 0.4 sec.<br>• Based on CIPA testing standards. |
| **Dimensions and Weight** | |
| **Dimensions (W x H x D)** | Approx. 5.20 x 3.56 x 3.61 in. / 132.0 x 90.4 x 91.7 mm<br>• Based on CIPA standards. |
| **Weight** | Approx. 1.1 lbs (18.70 oz) Body Only<br>Approx. 1.3 lbs (21.59 oz) With battery,and memory card |
| **Operating Environment** | |
| **Working Temperature Range** | 32–104°F / 0–+40°C |
| **Working Humidity Range** | 85% or less |