Specifications

Type

Type	
Type	Digital single-lens mirrorless AF/AE camera
Recording Media	SD/SDHC/SDXC memory cards • UHS-I compatible
Image Format	Approx. 22.3 x 14.9mm (APS-C)
Compatible Lenses	Canon EF-M, EF* and EF-S* lenses * Canon EF and EF-S lenses require Mount Adapter EF-EOS M.
Lens Mount	Canon EF-M mount

Image Sensor

Image Sensor	
Type	CMOS sensor (supporting Dual Pixel CMOS AF)
Effective Pixels	Approx. 24.1 megapixels
Total Pixels	Approx. 25.8 megapixels
Aspect Ratio	3:2 (Horizontal:Vertical)

Recording Format

Recording Format	
File Format	Design rule for Camera File system 2.0, Exif 2.31 compliant, Supports time difference information
Data Type	RAW (Canon .CR3, 14-bit); C-RAW (Canon .CR3) and JPEG (12-bit A/D conversion for RAW images in continuous shooting mode)

Recording Pixels	Large: Approx. 24.00 Megapixels Medium: Approx. 10.60 Megapixels Small 1: Approx. 5.90 Megapixels Small 2: Approx. 3.80 Megapixels RAW / C-RAW: Approx. 24.00 Megapixels 3:2 Aspect Ratio Large: 6000 x 4000 Medium: 3984 x 2656 Small 1: 2976 x 1984 Small 2: 2400 x 1600 RAW / C-RAW: 6000 x 4000 4:3 Aspect Ratio Large: 5328 x 4000 Medium: 3552 x 2664 Small 1: 2656 x 1992 Small 2: 2112 x 1600 RAW / C-RAW: 6000 x 4000 16:9 Aspect Ratio Large: 6000 x 3368 Medium: 3984 x 2240 Small 1: 2976 x 1680 Small 2: 2400 x 1344 RAW / C-RAW: 6000 x 4000 1:1 Aspect Ratio Large: 4000 x 4000 Medium: 2656 x 2656 Small 1: 1984 x 1984 Small 2: 1600 x 1600 RAW / C-RAW: 6000 x 4000 • The recording pixels number is rounded to the whole number nearest to 10,000 or 1,000.
Folder Setting	Creating new folders and selecting folders in the card is possible.
File Numbering	Continuous, Auto Reset

Image Processing During Shooting

Picture Style	• Auto • Standard • Portrait • Landscape • Fine Detail • Neutral • Faithful • Monochrome • User Defined 1–3

White Balance	• Auto (Ambience priority/White priority) • Daylight • Shade • Cloudy*¹ • Tungsten light • White fluorescent light • Flash • Color temperature • Custom (Custom WB)*² • White Balance Shift — blue~amber and/or magenta~green; ± 9 levels *¹ Effective also in twilight and sunset. *² Custom white balance is not available for monochrome images and images with Creative filters applied.
Noise Reduction	• High ISO speed NR — Disable, Low, Standard, High, and Multi-shot NR possible • Long Exposure noise reduction (at shutter speeds 1 second and longer) — Disable, Auto, or Enable
Automatic Image Brightness Correction	Auto Lighting Optimizer (Disable, Low, Standard, or High) (Not available if Highlight Tone Priority is active)
Highlight Tone Priority	Provided: (Disable, Enable, or Enhanced)
Lens Aberration Correction	• Peripheral illumination correction • Distortion correction • Digital Lens Optimizer (DLO) • Chromatic aberration correction • Diffraction correction

Creative Assist	During shooting (in Scene Intelligent Auto):
	  • Vivid, Soft, Warm, Cool, Green, Shine, Lime, Peach, B&W, Blue, Purple
	  • Image Creation Effects — Background blur, Brightness, Contrast, Saturation, Color Tone 1, Color-tone 2, Monochrome
	
	Creative Assist during playback (RAW or C-RAW images):
	  • Auto 1, Auto 2, Auto 3, Vivid, Soft, Warm, Cool, Green, Shine, Lime, Peach, B&W, Blue, Purple, Normal
	  • Image Creation Effects — Brightness, Contrast, Saturation, Color tone 1, Color tone 2, Monochrome

Autofocus

Type	Dual Pixel CMOS AF (1-point AF, Spot AF, Face+Tracking priority AF, Zone AF)
AF Points	Up to 143 points (Maximum)
Focusing Brightness Range	EV -4–18 (at Center AF point, room temperature, ISO 100, f/1.4, in One-Shot AF)
AF Operation	One-Shot AF, Servo AF, or Manual Focus
AF Assist Beam	Built-in LED lamp

Exposure Control

Metering Modes	Real-time metering using the image sensor
	  Evaluative metering
	  Partial metering (Approx. 5.8% of screen)
	  Spot metering (Approx. 2.9% of screen)
	  Center-weighted Average

Brightness Metering Range	Stills: EV -1–20 (at room temperature 73°F/23°C, ISO 100) Video: EV 0–20 (at room temperature 73°F/23°C, ISO 100)

Exposure Control	Via SHOOTING MODE in menu:
	  • Program AE, Shutter-priority AE, Aperture-priority AE, or Manual
	  (B is selected as shutter speed setting in Manual mode)

ISO Speed Range (Recommended Exposure Index)	Stills: ISO 100–25600 (in 1/3-stop increments) Video: ISO 100-12800; H: 25600
Exposure Compensation	Manual: ±3 stops in 1/3-stop increments
AE Lock	Manual, Auto (exposure locked after focusing, in One-Shot AF with Evaluative metering)

Shutter

Type	Vertical-travel mechanical focal-plane shutter, electronically controlled at all speeds
Shutter Speeds	Creative Zone: 1/4000 to 30 sec., bulb *X-sync at 1/200 sec. Basic Zone: 1/4000 to 1 sec.

Flash Units

Built-in Flash	Manual pop-up flash (Max. Guide Number approx. 16.4 [ft] / 5.0 [m], at ISO 100)
Flash Metering Mode	E-TTL II autoflash (evaluative, average), FE lock
Flash Exposure Compensation	±2 stops in 1/3-stop increments
FE Lock	Provided
External Flash	Not supported

Drive, Self-timer System

Drive Mode and Continuous Shooting Speed (Approx.)	<table><tr><td>Single Shooting</td><td>Single Shooting</td></tr><tr><td>Continuous Shooting</td><td>When set to ONE SHOT AF: Max. Approx. 6.1 shots/sec.*1 When set to SERVO: Max. Approx. 4.0 shots/sec.*1</td></tr><tr><td>Self-timer: 10 sec. / Remote Control</td><td>Single shooting with a remote control*2</td></tr><tr><td>Self-timer: 2 sec.</td><td>Shoots 2 sec. after the shutter button is pressed</td></tr><tr><td>Self-timer: Continuous</td><td>Takes the specified number of shots 10 sec. after the shutter button is pressed</td></tr></table> *1 Conditions for maximum continuous shooting speed are as follows: fully charged Battery Pack LP-E12, shutter speed: 1/1000 sec. or faster, maximum aperture (f/3.5), room temperature (73°F/23°C), 12 bit *2 BR-E1: Supported / RC-6: Not supported
Maximum Burst	<table><tr><th>Image Quality</th><th>Image File Size (approx. MB)</th><th>Possible Shots (approx.)*1</th><th>Maximum Burst (approx.)*1</th></tr><tr><td>Large (Fine)</td><td>8.4</td><td>3600</td><td>71</td></tr><tr><td>Large (Normal)</td><td>4.5</td><td>6610</td><td>71</td></tr><tr><td>Medium (Fine)</td><td>4.6</td><td>6480</td><td>70</td></tr><tr><td>Medium (Normal)</td><td>2.6</td><td>11400</td><td>70</td></tr><tr><td>Small 1 (Fine)</td><td>3.1</td><td>9690</td><td>70</td></tr><tr><td>Small 1 (Normal)</td><td>1.8</td><td>16010</td><td>70</td></tr><tr><td>Small 2</td><td>1.8</td><td>16340</td><td>70</td></tr><tr><td>RAW</td><td>27.2</td><td>1120</td><td>13</td></tr><tr><td>C-RAW</td><td>15.8</td><td>1930</td><td>31</td></tr><tr><td>RAW + Large (Fine)</td><td>27.2 + 8.4</td><td>850</td><td>12</td></tr><tr><td>C-RAW + Large (Fine)</td><td>15.8 + 8.4</td><td>1250</td><td>22</td></tr></table> *1 The number of possible shots and maximum burst apply to a 32GB card based on Canon testing standards.
Self-timer Mode	Off, 2-second self-timer, 10-second self-timer, Continuous timer

Live View Functions

Aspect Ratio Settings	3:2, 4:3, 16:9, 1:1 (Frame Grab images from 4K movies cannot be cropped)
Focus Mode	AF, MF, AF+MF (Manual focus after One-Shot AF) MF peaking provided
Continuous AF	Provided
Touch Shutter	Provided
Grid Display	Off / 3x3 / 6x4 / 3x3+diag
Depth of Field Preview	Provided

Video Shooting

Recording System	MP4
File Format	Video: MPEG-4 AVC / H.264 • Variable (averaged) bit rate Audio: AAC
Recording Size and Frame Rate	4K (3840 x 2160): 23.98 fps (Time Laps only — 29.97 fps) Full HD (1920 x 1080): 59.94 fps / 29.97 fps HD (1280 x 720): 59.94 fps (Hybrid Auto — 29.97 fps; High Frame Rate movies — 119.88 fps)
Movie Exposure Modes	Movie Auto Exposure; Movie Manual Exposure
Metering Mode	Evaluative metering / Center-weighted metering (when no faces are detected)
Exposure Compensation	±3 stops in 1/3-stop increments
ISO Speed (Recommended Exposure Index)	ISO 100–6400; H: 12800
Miniature Effect Movie	Provided (Full HD 1920 x 1080, 29.97 fps)
Still Image Shooting	Provided (Possible with Hybrid Auto setting; HD 1280 x 720 at 29.97 fps)
Continuous Shooting Time	<table><tr><td colspan="2">Video Recording Size</td><td>8GB</td><td>32GB</td><td>128GB</td><td>File Size (approx.)</td></tr><tr><td>4K (3840 x 2160)</td><td>23.98 fps</td><td>8 min.</td><td>35 min.</td><td>2 hr. 21 min.</td><td>120 Mbps 860 MB/min.</td></tr><tr><td rowspan="2">Full HD (1920 x 1080)</td><td>59.94 fps</td><td>17 min.</td><td>1 hr. 10 min.</td><td>4 hr. 43 min.</td><td>60 Mbps 431 MB/min.</td></tr><tr><td>29.97 fps</td><td>35 min.</td><td>2 hr. 20 min.</td><td>9 hr. 23 min.</td><td>30 Mbps 216 MB/min.</td></tr><tr><td rowspan="2">HD (1280 x 720)</td><td>59.94 fps</td><td>40 min.</td><td>2 hr. 42 min.</td><td>10 hr. 49 min.</td><td>26 Mbps 187 MB/min.</td></tr><tr><td>119.88 fps</td><td>20 min.</td><td>1 hr. 22 min.</td><td>5 hr. 28 min.</td><td>52 Mbps 371 MB/min.</td></tr></table> * Limitations of video shooting: continuous shooting is possible until the memory card becomes full or the recording length for one video reaches approx. 29 minutes and 59 seconds (or 7 min. 29 sec. for a HD High Frame Rate Movie). * For 4K movies, movie recording stops automatically when the recording time reaches 9 min. 59 sec. * Recording bit rate of movie images only, sound data not included.
Sound Recording	Built-in stereo microphones, recording level adjustable, wind filter provided, attenuator provided

Video Recording Size			SD card
4K (3840 x 2160)	IPB (standard)	23.98 fps	UHS-I, UHS speed Class 3 or higher
Full HD (1920 x 1080)	IPB (standard)	59.94 fps	SD Speed Class 10 or higher
	IPB (standard)	29.97 fps	SD Speed Class 4 or higher
HD (1280 x 720)	IPB (standard)	59.94 fps	SD Speed Class 4 or higher
		119.88 fps	SD Speed Class 10 or higher
Time-lapse movie UHD (3840 x 2160)	ALL-I	29.97 fps	Read speed of 40 MB/s or higher
Time-lapse movie Full HD (1920 x 1080)		29.97 fps	Read speed of 20 MB/s or higher

The "Card Performance Requirements" label spans the left of the above table.

Screen (Monitor)

Type	TFT color, liquid-crystal monitor
Screen Size	3.0-inch type
Dots	Approx. 1.04 million dots
Brightness Adjustment	Manually adjustable to one of seven brightness levels
Angle Adjustment	Tilt type: Up to approx. 180° upward
Interface Languages	29 (English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Romanian, Ukrainian, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean, Malay, Vietnamese, Indonesian, Hindi, Japanese)
Hints & Tips	Displayable

Playback Functions

Playback Methods	Playback on camera's LCD screen • HDMI playback to compatible TVs - (AV cables not supported) • Playback on computer screen - (requires compatible software)
Playback Display Options	• Single image, or 4, 9, 36, or 100-image index • Viewing options via INFO button: full image, full image with basic info, thumbnail image with histogram and detailed shooting info, RGB and Brightness histograms with lens info
Zoom Magnification	Approx. 1.5x to 10.0x (Can be activated by double-tapping)
Image Browsing Methods	• Single image • 10 images • Specified number (1-100 images) • Date • Folder • Movies • Still images • Protected images • Ratings
Image Rotate	Provided
Rating	Provided (Off, 1~5 stars)
Video Playback	Provided (with built-in speaker)

Playback Time	Approx. 4 hr. 55 min. * With a fully charged LP-E12 * Time when playing back a slideshow of still photos
Slideshow	• All images • Slideshow of images after selection from the search list • Background music: Off / On

Post-processing of Images

Creative Filters	• Grainy B/W • Soft focus • Fish-eye effect • Water painting effect • Toy camera effect • Miniature effect • HDR art standard • HDR art vivid • HDR art bold • HDR art embossed
Cropping	Cropping frame movement: all directions Tilt correction Aspect ratio (3:2, 16:9, 4:3, 1:1, 2:3, 9:16, 3:4) * Frame grab images from 4K movies cannot be cropped.
Resize	M, S1, S2 * Frame grab images from 4K movies cannot be resized.
Red-eye Reduction	Provided

Direct Printing

Compatible Printers	PictBridge
Printable Images	• JPEG • RAW / C-RAW

Custom Functions

Custom Functions	6 Available
Customizable Buttons	Shutter button, Movie button
Copyright Info	Provided

Interface

Digital Terminal	Micro-B (Hi-Speed USB 2.0 compliant)
HDMI OUT Terminal	Type D (resolution switches automatically) • HDMI output while recording (shooting screen without sound) provided • CEC not supported
Wireless Remote Control	• Compatible with Wireless Remote Control BR-E1 • Not compatible with accessories using the infrared transmission system of Remote Controller RC-6

Wi-Fi® (Wireless LAN)

Standards Compliance	IEEE 802.11b/g/n
Transmission Method	DS-SS modulation (IEEE 802.11b), OFDM modulation (IEEE 802.11g/n)
Transmission Frequency (Central Frequency)	Frequency: 2412–2462 MHz Channels: 1–11 ch

Connection Method and Security	(1) Infrastructure mode
	   a. WPA2-PSK
	      i. AES
	      ii. TKIP
	   b. WPA-PSK
	      i. AES
	      ii. TKIP
	   c. Open
	      i. WEP
	      ii. None
	   d. Wi-Fi® Protected Setup compliant
	(2) Camera access point mode
	   a. WPA2-PSK
	      i. AES
	   b. Open
	      i. None

Network Functions

Supported Wireless Functions	• Connect to compatible smart phone or tablet • Remote-control camera from compatible mobile device • Remote-control camera with optional Canon BR-E1 Remote Controller • Send still images or video files to mobile device • Upload images to Web service • Send images to compatible computer • Print to compatible Wi-Fi enabled printer • Geo-tag in-camera images with GPS data from compatible smart phone (Bluetooth required)
Transfer Images Between Cameras	Not Possible
Connection to Smart phones	Connect with free Canon Camera Connect app (Android and iOS versions available for compatible mobile devices)
Wireless Connection Types	Wi-Fi® and Bluetooth v. 4.2 (low-energy)

Power Supplies

Battery	Battery Pack LP-E12
Battery Life	Number of Still Image Shots CIPA compliant, Room Temperature 73°F/23°C: Approx. 315 shots Eco Mode On: Approx. 485 shots Movie Recording Time CIPA compliant, Room Temperature 73°F/23°C: Approx. 90 min. Continuous Shooting*: Approx. 135 min. * Total shooting time when shooting is performed under the following conditions: using default AUTO Mode, without using zooming and other operations, when max. recording time per movie is reached and recording stops/resumes automatically.

Dimensions and Weight

Dimensions (W x H x D)	Approx. 4.3 x 2.6 x 1.4 in. (108.2 x 67.1 x 35.1mm) • CIPA compliant.
Weight	Approx. 10.55 oz. / 299g (Including battery pack and memory card) Approx. 9.24 oz. / 262g (Body only)

Operating Environment

Working Temperature Range	32–104°F / 0–40°C

Working Humidity Range	85% or less