Specifications

Type	
Type	Digital, AF/AE single-lens reflex camera with built-in flash
Recording Media	SD, SDHC and SDXC Memory Cards • Compatible with SD speed class cards. • Not compatible with UHS speed class cards. • Compatible with Eye-Fi Cards. • Multimedia cards (MMC) cannot be used. (A card error will be displayed.)
Image Format	Approx. 22.3mm x 14.9mm (APS-C)
Compatible Lenses	Canon EF Lenses (including EF-S lenses and excluding EF-M lenses)
Lens Mount	Canon EF mount

Image Sensor	
Type	CMOS sensor
Pixels	Effective pixels: Approx. 24.10 megapixels (rounded to the nearest 100,000) Total pixels: Approx. 24.70 megapixels (rounded to the nearest 100,000)
Pixel Unit	Approx. 3.72 µm square
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) Dust Delete Data acquisition and appending • The coordinates of the dust adhering to the low-pass filter are detected by a test shot and appended to subsequent images. • The dust coordinate data appended to the image is used by the EOS software to automatically erase the dust spots. (2) Manual cleaning by hand • Self Cleaning Sensor Unit not provided.

Recording System	
Recording Format	Compliant to Design rule for Camera File system 2.0 and Exif 2.30
Image Format	JPEG, RAW (14 bit Canon original)
File Size	3:2 Aspect Ratio Large: 6000 x 4000 Medium: 3984 x 2656 Small 1: 2976 x 1984 Small 2: 1920 x 1280 Small 3: 720 x 480 RAW: 6000 x 4000 4:3 Aspect Ratio Large: 5328 x 4000* Medium: 3552 x 2664 Small 1: 2656 x 1992 Small 2: 1696 x 1280* Small 3: 640 x 480 RAW: 6000 x 4000 16:9 Aspect Ratio Large: 6000 x 3368* Medium: 3984 x 2240* Small 1: 2976 x 1680* Small 2: 1920 x 1080 Small 3: 720 x 408* RAW: 6000 x 4000 1:1 Aspect Ratio Large: 4000 x 4000 Medium: 2656 x 2656 Small 1: 1984 x 1984 Small 2: 1280 x 1280 Small 3: 480 x 480 RAW: 6000 x 4000 * The dimensions will not attain a perfect aspect ratio. Values are rounded to the nearest 100,000. (Nearest 10,000 for S3.) For JPEG, the image will be generated according to the selected aspect ratio. RAW images are generated in [3:2], and the set aspect ratio is appended.

File Numbering	The following three types of file numbering method can be set:
	(1) Continuous numbering
	    • The numbering of captured images will continue even after you replace the card. (The numbering continues even when the folder changes.)
	(2) Auto reset
	    • When you replace the camera's card, the numbering will be reset to start from 0001. If the new card already contains images, the numbering will continue from the last recorded image in the card.
	(3) Manual reset
	    • Resets the file number to 0001, and creates a new folder automatically.

Color Space	sRGB/Adobe RGB

Picture Style	(1) Auto
	(2) Standard
	(3) Portrait
	(4) Landscape
	(5) Neutral
	(6) Faithful
	(7) Monochrome
	(8) User Defined 1–3
	      a. In Basic Zone modes, "Auto" is set automatically.
	      b. In Creative Zone modes, you can select and set the Picture Style.
	      c. Default settings for [User Defined 1–3] are [Auto].

White Balance

Settings	(1) Auto (Ambience priority / White priority) (2) Daylight (3) Shade (4) Cloudy* (5) Tungsten light (6) White fluorescent light (7) Flash (8) Custom (Custom WB) * Effective also in twilight and sunset.
Auto White Balance	Option between ambience priority and white priority settings
Color Temperature Compensation	Blue/amber bias: ±9 levels Magenta/green bias: ±9 levels Corrected in reference to the current WB mode's color temperature.

Viewfinder

Type	Eye-level single lens reflex (with fixed pentamirror)
Coverage	Approx. 95% vertically and horizontally (with Eye point approx. 21mm)
Magnification/ Angle of View	Approx. 0.8x / 22.4° ($-1m^{-1}$ with 50mm lens at infinity)
Eye Point	Approx. 21mm (At $-1m^{-1}$ from eyepiece lens center)
Dioptric Adjustment Correction	Adjustable from approx. -2.5 to +0.5 m^{-1} (dpt)
Focusing Screen	Fixed
Mirror	Quick-return half mirror
Viewfinder Information	AF point, AF point activation indicator, ISO speed, White balance correction, Focus indicator, Maximum burst, Monochrome shooting, ISO speed, Highlight tone priority, Exposure level indicator, Exposure compensation amount AEB range, Red-eye reduction lamp ON, Aperture, Card full warning, Card error warning, No card warning, Shutter speed, FE lock, Busy, Built-in flash recycling, Flash exposure compensation, High-speed sync (FP flash), FE lock/FEB in-progress, Flash-ready, FE lock out of range warning, AE lock/AEB in-progress, Focusing screen
Depth of Field Preview	Possible (with C.Fn-9 (Assign SET button) setting)

Autofocus

Type	TTL secondary image-forming phase-difference detection system with AF-dedicated sensor
AF Points	9 points All AF points support f/5.6 Cross-type AF with center AF point
AF Working Range	With One-Shot AF (at room temperature and ISO 100, based on Canon's testing standards) EV 0–18 (center AF point) EV 1–18 (other AF points)

Focusing Modes	(1) Autofocus
	    1. One-Shot AF
	    2. Predictive AI Servo AF
	    3. AI Focus AF
	      • Switches between One-Shot AF and AI Servo AF automatically.
	(2) Manual focus

AF Point Selection	(1) Manual selection (2) Auto selection • AF point selection for Basic Zone modes is fixed to Automatic selection.
AF Assist Beam	Intermittent firing of built-in flash Effective range: Center: Approx. 13.1 ft. / 4.0m Periphery: Approx. 11.5 ft. / 3.5m With an EOS-dedicated Speedlite attached, the Speedlite's AF-assist beam is emitted instead.

Exposure Control

Metering Mode	Dual-layer metering sensor with the area divided into 63 zones.
	    (1) Evaluative metering (supporting all AF points)
	    (2) Partial metering (center, approx. 10% of viewfinder)
	    (3) Center-weighted average metering
	* Spot metering not provided.

Metering Range	EV 1–20 (room temperature, ISO 100, evaluative metering)

Exposure Control Systems	Creative Zone
	    (1) Program AE (shiftable)
	    (2) Shutter-priority AE
	    (3) Aperture-priority AE
	    (4) Manual exposure (including bulb)
	Basic Zone
	    (1) Scene Intelligent Auto (Program AE/non-shiftable)
	    (2) Flash Off
	    (3) Creative Auto
	    (4) Portrait
	    (5) Landscape
	    (6) Close-up
	    (7) Sports
	    (8) Food
	    (9) Night Portrait

ISO Speed Range	Manual ISO setting: ISO 100–6400 (in whole-stop increments), expandable equivalent to ISO 12800. If highlight tone priority is set, the ISO speed is automatically set within ISO 200 to ISO 6400. ISO Auto setting: ISO 100–6400 In Creative Zone modes, the maximum ISO speed (ISO 400, 800, 1600, 3200 or 6400) for ISO Auto can be set. <table><tr><th>Shooting Mode</th><th>ISO Settings</th></tr><tr><td>Scene Intelligent Auto, Flash Off, Creative Auto, Landscape, Close-up, Sports, Food, Night Portrait</td><td>ISO 100–3200</td></tr><tr><td>Portrait</td><td>ISO 100</td></tr><tr><td>P, Tv, Av, M</td><td>ISO 100–6400[1]</td></tr><tr><td>With flash</td><td>ISO 800[2,3,4,5]</td></tr><tr><td>With bulb exposures</td><td>ISO 800[5]</td></tr></table> [1] Depends on the set maximum limit of ISO speed. [2] If fill-flash results in overexposure, minimum limit can be set to ISO 100. [3] If you use bounce flash with an external Speedlite in Basic Zone modes (except Night Portrait) or P mode, the ISO speed is automatically set within ISO 800 to ISO 1600 (or up to the set maximum limit) in accordance with the brightness. [4] Fixed to ISO 400 in Food mode. If you use bounce flash with an external Speedlite in Food mode, the ISO speed is automatically set in the range within ISO 400 to ISO 1600. [5] When the maximum ISO speed is ISO 400, the speed is fixed at ISO 400.
Exposure Compensation	(1) Manual: ±5 stops in 1/3- or 1/2-stop increments 　• If the exposure compensation exceeds ±2 stops, the left or right icon will appear in the viewfinder. (2) AEB: ±2 stops in 1/3- or 1/2-stop increments Correction Factor <table><tr><th rowspan="2">Shooting Mode</th><th colspan="3">Correction Factor</th></tr><tr><th>Shutter Speed</th><th>Aperture</th><th>ISO Speed</th></tr><tr><td>P</td><td>Yes</td><td>Yes</td><td rowspan="4">Yes (with ISO Auto)</td></tr><tr><td>Tv</td><td>–</td><td>Yes</td></tr><tr><td>Av</td><td>Yes</td><td>–</td></tr><tr><td>M</td><td>Yes (with AEB)</td><td>–</td></tr></table> Manual exposure compensation and AEB can be set in combination. AEB is set in the following sequence: Standard exposure, decreased exposure and increased exposure. If AEB is used with the self-timer, the three bracketed shots will be taken in succession after the 10-sec. or 2-sec. delay.
AE Lock	(1) Auto AE lock 　• In the One-Shot AF mode with evaluative metering, AE lock takes effect when focus is achieved. (2) Manual AE lock 　• In P, Tv and Av modes, possible with the AE lock button. (Press again to update.) 　• Possible in all metering modes.

Shutter	
Type	Vertical-travel shutter with electronic first-curtain control and mechanical second-curtain control
Shutter Speeds	1/4000 to 30 sec., Bulb (Total shutter speed range) X-sync at 1/200 sec. *Settable in 1/3- or 1/2-stop increments.
Shutter Release	Soft-touch electromagnetic release
Self Timer	10-sec. delay, 2-sec. delay
Shutter Lag Time	(1) During SW-1 ON, time lag between SW-2 ON and start of exposure: Approx. 120 ms (2) Time lag between simultaneous SW-1/SW-2 ON and start of exposure: Approx. 240 ms
Remote Control	Possible by using Remote Switch RS-60E3
Built-in Flash	
Type	Auto pop-up, retractable, built-in flash in the pentamirror
Flash Metering System	E-TTL II autoflash (Evaluative, Average), FE lock
Guide Number	Approx. 30.2 ft./9.2m (at ISO 100)
Recycling Time	Approx. 2 sec.
Flash Coverage	Up to approx. 17mm focal length (equivalent to approx. 28mm in 35mm format)
Flash Exposure Compensation	Up to ±2 stops in 1/3- or 1/2-stop increments Flash exposure compensation for built-in flash and external Speedlite can be set with the camera.
FE Lock	Possible
External Speedlite	
Flash Exposure Compensation	±2 stops in 1/3- or 1/2-stop increments
Drive System	

Drive Modes	(1) Single shooting
	(2) Continuous shooting
	    • Max. approx. 3.0 fps
	    • Shutter speed 1/500 sec., Maximum aperture
	    • Continuous shooting speed may become slower depending on the shutter speed, aperture, subject condition, brightness, lens model, flash use, remaining battery capacity, etc.
	(3) 10-sec. self-timer
	(4) 2-sec. self-timer
	(5) Continuous shooting after 10-sec. self-timer (2 to 10 shots)

Continuous Shooting Speed	Max. approx. 3.0 fps

	Image File Size/Number of Possible Shots/Maximum Burst During Continuous Shooting:			
Maximum Burst	Image Recording Quality	Image File Size (Approx. MB)	Possible Shots (Approx.)	Maximum Burst (Approx.)
	Large/Fine	7.5	940	150
	Large/Normal	3.7	1920	Full
	Medium/Fine	3.9	1820	Full
	Medium/Normal	1.9	3580	Full
	Small 1/Fine	2.4	2880	Full
	Small 1/Normal	1.3	5440	Full
	Small 2	1.3	5440	Full
	Small 3	0.3	19380	Full
	RAW + Large/Fine	30.3 + 7.5	180	6
	RAW	30.3	230	11

The number of possible shots and maximum burst apply to an 8 GB card based on Canon's testing standards. The file size, number of possible shots and maximum burst vary depending on shooting conditions (aspect ratio of 3:2, subject, memory card brand, ISO speed, Picture Style, etc.).
"Full" indicates that shooting is possible until the card becomes full.

Live View Functions

Shooting Modes	Still photo and video recording

Focusing Modes	(1) Contrast AF
	  1. FlexiZone-Single
	  2. Face Detection Live mode
	   • Covers approx. 80% of the image display area vertically and horizontally.
	  3. Quick mode
	   • TTL secondary image registration, phase-difference detection with AF-dedicated sensor.
	   • AF point manual selection anda selection possible.
	   • Automatically set in Basic Zone modes.
	(2) Manual focus
	   • Magnify the image by approx. 5x or 10x and focus manually.

Metering Modes	Evaluative metering (315-zone) * AE lock possible. Metering timer duration can be changed.
Metering Range	EV 0–20 (room temperature, ISO 100)

Grid Display	One of two types of grids can be selected and displayed on the screen.
	  (1) Grid 1: 2 vertical and 2 horizontal lines (3x3)
	  (2) Grid 2: 5 vertical and 3 horizontal lines (6x4)

Video Shooting

File Format	MOV: Movie: MPEG4 AVC/H.264 * Variable (average) bit rate Audio: Linear PCM
File Size	[Full HD]: 1920 x 1080 (30 fps/24 fps): 340 MB/min. [HD]: 1280 x 720 (60 fps): 340 MB/min. [SD]: 640 x 480 (30 fps): 90 MB/min.
Frame Rates	1920 x 1080 (Full HD): 30 fps (29.97 fps) / 24 fps (23.98 fps) 1280 x 720 (HD): 60 fps (59.94 fps) 640 x 480 (SD): 30 fps (29.97 fps)

Continuous Shooting Time

Movie Recording Size		Total Recording Time per Card (approx.)				File Size (approx.)	Bit Rate (Mbps)
		8GB	16GB	32GB	64GB		
1920 x 1080	30 fps	22 min.	44 min.	1 hr. 29 min.	2 hr. 59 min.	340 MB/min.	46 Mbps
	24 fps						
1280 x 720	60 fps	22 min.	44 min.	1 hr. 29 min.	2 hr. 59 min.	340 MB/min.	46 Mbps
640 x 480	30 fps	1 hr. 25 min.	2 hr. 50 min.	5 hr. 40 min.	11 hr. 20 min.	90 MB/min.	11 Mbps

Actual frame rates are as follows:
60 fps: 59.94 fps, 30 fps: 29.97 fps, 24 fps: 23.98 (23.976) fps

Exposure Control	(1) Program AE for movie shooting
	  • Shutter speed 1/30–1/4000 sec. (signal accumulation time), aperture and ISO speed automatically set.
	(2) Manual exposure
	  • Shutter speed (signal accumulation time), aperture and ISO speed (auto/manual) manually set. The shutter speed (signal accumulation time) is limited to 1/4000 sec. at the maximum and to 1/30 sec. at the minimum for 24/30 fps or to 1/60 sec. or higher for 60 fps.

Focusing	(1) Contrast AF (2) Manual focus * Magnify the image by approx. 5x or 10x and focus manually.
Exposure Compensation	Possible (±3 stops)

LCD Monitor

Type	TFT color, liquid-crystal monitor
Monitor Size	3.0-inch (Screen aspect ratio of 4:3) Approx. 7.5cm diagonal (width: approx. 6.0cm, height: approx. 4.5cm)
Pixels	Approx. 920,000 dots
Coverage	Approx. 170° vertically and horizontally
Brightness Control	Adjustable to one of seven brightness levels
Interface Languages	25 (English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Hungarian, Czech, Romanian, Ukraine, Turkish, Arabic, Thai, Simplified/Traditional Chinese, Korean, Japanese)

Playback

Display Format	(1) Single image display
	  • Basic information
	  • Basic information + image quality/image file number
	  • Shooting information
	  • Histogram display
	(2) Index display; 4 or 9 images

Highlight Alert	On the detailed information and histogram displays, highlight areas with no image data will blink.

Quick Control Function

During Shooting	When you press the Quick Control button while shooting images, you can set various functions. Settable functions differ between viewfinder shooting, Live View shooting and movie shooting.
During Playback	When you press the Quick Control button during playback, you can set various functions. Settable functions differ between still photo shooting and movie shooting.

Image Protection and Erase

Protection	Erase protection can be applied/canceled for a single image, all images in a folder or all images in the card.
Erase	Erase unprotected image(s) with selection from Single image, Selected images, All images on folder or All images in a card.

Direct Printing

Compatible Printers	PictBridge-compatible printers
Printable Images	RAW and JPEG images compliant to "Design rule for Camera File System (DCF)" Movies cannot be printed.

DPOF: Digital Print Order Format

DPOF	Compliant to DPOF Version 1.1

Customization

Custom Functions	11 Custom Functions with 33 settings settable with the camera
Custom Controls	Not provided
Camera User Settings	Not provided
My Menu Registration	Menu functions, Custom Functions Up to six kinds of function settings can be selected and registered from the top-tier menu functions.

Interface

USB Terminal	Hi-Speed USB equivalent • Computer • PictBridge • Connect Station CS100 connection • GPS Receiver GP-E2 connection
Video Out Terminal	HDMI Type C (Resolution switches automatically) Video output: (Switches automatically to 1, 2, 3 or 4 to suit the connected device.) (1) 1080/60i (2) 1080/50i (3) 480/60p (4) 576/50p
Extension System Terminal	Remote Switch RS-60E3 Terminal

Wi-Fi® (Wireless LAN) and NFC Functions

Standards Compliance	IEEE 802.11b/g/n
Transmission Range	Approx. 49.21 ft. / 15m • When communicating with a smartphone or tablet. • With no obstructions between the antennas and no radio interference from other devices.
Connection Method	(1) Camera access point mode (2) Infrastructure mode

NFC Connection	Possible

Power Source

Battery	Battery Pack LP-E10 x 1 *The camera can be powered by an AC power supply by using the household power outlet accessories (sold separately).

Number of Shots	Camera body only

Camera body only

Shooting Method	Temperature	Possible Shots	
		AE 100%	AE 50%, FA 50% (Based on CIPA testing standards)
Viewfinder shooting	At 73°F/23°C	Approx. 600	Approx. 500
	At 32°F/0°C	Approx. 580	Approx. 410
Live View shooting	At 73°F/23°C	Approx. 260	Approx. 240
	At 32°F/0°C	Approx. 250	Approx. 230

Battery Check	Automatic battery check when the power switch is turned ON. Battery level indicated in one of the four levels on LCD monitor.
Power Saving	Power turns off automatically after the set time of non-operation elapses. • [Auto power off] settable to 30 sec., 1 min., 2 min., 4 min., 8 min., 15 min. or Disable
Date/Time Battery	Built-in secondary battery Maintains date/time for about 3 months when fully charged
Start-up Time	Approx. 0.1 sec. (CIPA standards)

Dimensions and Weight

Dimensions (W x H x D)	Approx. 5.08 x 3.99 x 3.06 in. / 129.0 x 101.3 x 77.6mm *In CIPA guidelines
Weight	Approx. 16.75 oz. / 475g (including battery and card) Approx. 15.06 oz. / 427g (body only)

Operating Environment

Working Temperature Range	32–104°F/0–40°C
Working Humidity Range	85% or less