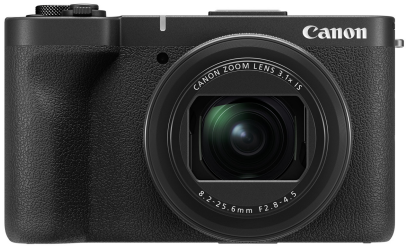
Canon

PowerShot V1



Advanced User Guide

These operating instructions are for the PowerShot V1 with firmware ver. 1.1.0 or later installed.

EN

CT2-D293-B

Specifications

Lens

Focal length	Movie recording (4K, 16:9)	8.2–25.6 mm Equivalent to approx. 17–52 mm (35 mm equivalent)
	Still photo shooting (without cropping)	8.2–25.6 mm Equivalent to approx. 16–50 mm (35 mm equivalent)
	Still photo shooting (1.4x crop)	8.2–25.6 mm Equivalent to approx. 23–71 mm (35 mm equivalent)
Angle of view	Movie recording (4K, 16:9)	104.4–44.9°
	Still photo shooting (without cropping)	107.0–46.8°
	Still photo shooting (1.4x crop)	86.8–33.7°
Aperture	Number of blades	9
	F-number (max. aperture)	f/2.8–4.5
	Minimum aperture	WIDE / TELE: f/11
Lens configuration		9 elements in 8 groups
Focusing range		WIDE: 0.05 m–∞ / 0.16 ft–∞ TELE: 0.15 m–∞ / 0.49 ft–∞

Image sensor

Type: 1.4 type CMOS sensor

Effective pixels*1*2	Movie recording	Max. approx. 18.7 megapixels
	Still photo shooting	Max. approx. 22.3 megapixels
Total pixels*1		Approx. 23.9 megapixels
Screen size		Approx. 18.4×12.3 mm
Dual Pixel CMOS AF		Supported

* 1: Rounded to the nearest 100,000.
* 2: The effective pixel count may be lower with certain image processing.

Recording system

Image recording format: Compliant with Design rule for Camera File system 2.0 and Exif 2.31*1

* 1: Supports time difference information.

Image type/recording format/extension

Image type / recording format		Extension
Still photo	JPEG	.JPG
	HEIF	.HIF
	RAW	.CR3
	C-RAW	
	Dual Pixel RAW	
Movie	ALL-I*1 / IPB (Standard) / IPB (Light)	.MP4

* 1: Time-lapse movies only.

Recording media

Recording media

SDXC/SDHC/SD memory cards

UHS-II	Supported
UHS-I	Supported
UHS speed class	Supported
SD speed class	Supported

Still photo recording

Recording pixel count

Image size		Resolution (Pixels)				
		Still photo cropping / aspect ratio				
		3:2 (aspect ratio)	1.4× (crop)*1	1:1 (aspect ratio)	4:3 (aspect ratio)	16:9 (aspect ratio)
JPEG / HEIF	L	Approx. 22.1 megapixels (5760×3840)	Approx. 10.8 megapixels (4032×2688)	Approx. 14.7 megapixels (3840×3840)	Approx. 19.7 megapixels (5120×3840)	Approx. 18.7 megapixels (5760×3240)
	M	9.8 megapixels (3840×2560)		Approx. 6.6 megapixels (2560×2560)	Approx. 8.7 megapixels*2 (3408×2560)	Approx. 8.3 megapixels (3840×2160)
	S1	Approx. 5.5 megapixels (2880×1920)		Approx. 3.7 megapixels (1920×1920)	Approx. 4.9 megapixels (2560×1920)	Approx. 4.7 megapixels*2 (2880×1616)
	S2	Approx. 3.8 megapixels (2400×1600)	Approx. 3.8 megapixels (2400×1600)	Approx. 2.6 megapixels (1600×1600)	Approx. 3.4 megapixels*2 (2112×1600)	Approx. 3.2 megapixels*2 (2400×1344)
RAW C-RAW Dual Pixel RAW	RAW / CRAW	Approx. 22.1 megapixels (5760×3840)	Approx. 10.8 megapixels (4032×2688)	Approx. 22.1 megapixels*2 (5760×3840)		

* Values for recorded pixels are rounded to the nearest 100,000.
* RAW/C-RAW images are generated in “3:2”, and the set aspect ratio information is appended to the images.
* JPEG/HEIF images are generated in the set aspect ratio.
* These aspect ratios and pixel counts also apply to resizing.
* 1: Angle of view of approx. 1.4 times the focal length.
* 2: Aspect ratios are slightly different for these image sizes.

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

Mechanical shutter

Image quality		File size [Approx. MB]	Available shots [Approx.]*1	Maximum burst [Approx.]*1
JPEG*2	L	7.6	3970	160
	L	4.1	7260	370
	M	4.3	7040	560
	M	2.4	12240	560
	S1	2.9	10430	740
	S1	1.7	17050	740
	S2	1.8	16640	960
HEIF*3	L	7.2	4110	150
	L	5.5	5310	210
	M	4.5	6420	290
	M	3.5	8060	310
	S1	3.1	9110	360
	S1	2.6	11050	380
	S2	1.8	14660	460
RAW*2*4	RAW	23.5	1290	24
	CRAW	11.7	2620	69
RAW*4+JPEG*2	RAW+L	23.5 + 7.6	970	22
	CRAW+L	11.7 + 7.6	1580	53
RAW*4+HEIF*3	RAW+L	25.5 + 7.2	910	22
	CRAW+L	13.7 + 7.2	1430	53

* 1: Available shots and maximum burst for SD cards applies to 32 GB UHS-I SD cards conforming to Canon testing standards.
* 2: When [**HDR shooting (PQ)**: **Disable**] is set.
* 3: When [**HDR shooting (PQ)**: **Enable**] is set.
* 4: When [**Dual Pixel RAW**: **Disable**] is set.
* Maximum burst as measured under conditions conforming to Canon testing standards (One-shot AF, High-speed continuous shooting+, ISO 100, and Standard Picture Style).
* File size varies by shooting conditions (such as cropping/aspect ratio, subject, ISO speed, and Picture Style).
* Available shots and maximum burst varies depending on shooting conditions (such as cropping/aspect ratio, subject, memory card brand, ISO speed, and Picture Style).

Electronic shutter

Image quality		File size [Approx. MB]	Available shots [Approx.]*1	Maximum burst [Approx.]*1
JPEG*2	4L	See "Mechanical shutter".		69
	4L			69
	4M			72
	4M			72
	4S1			72
	4S1			72
	S2			72
HEIF*3	4L			64
	4L			64
	4M			73
	4M			73
	4S1			73
	4S1			73
	S2			74
RAW*2*4	RAW			19
	CRAW			45
RAW*4+JPEG*2	RAW+4L			19
	CRAW+4L			45
RAW*4+HEIF*3	RAW+4L			16
	CRAW+4L			45

* 1: Available shots and maximum burst for SD cards applies to 32 GB UHS-I SD cards conforming to Canon testing standards.
* 2: When [**HDR shooting (PQ)**: **Disable**] is set.
* 3: When [**HDR shooting (PQ)**: **Enable**] is set.
* 4: When [**Dual Pixel RAW**: **Disable**] is set.
* Maximum burst as measured under conditions conforming to Canon testing standards (One-shot AF, High-speed continuous shooting+, ISO 100, and Standard Picture Style).
* File size varies by shooting conditions (such as cropping/aspect ratio, subject, ISO speed, and Picture Style).
* Available shots and maximum burst varies depending on shooting conditions (such as cropping/aspect ratio, subject, memory card brand, ISO speed, and Picture Style).

Movie recording

Movie recording format

Canon Log		OFF		ON (Canon Log 3)
HDR PQ		OFF	ON	OFF
Container format		MP4		
Compression		H.264 / MPEG-4 AVC	H.265 / HEVC	
Color sampling method		YCbCr 4:2:0	YCbCr 4:2:2	
Standards compliance		Rec. ITU-R BT.709	Rec. ITU-R BT.2100	—
Audio	IPB (Standard)	AAC / Linea PCM		
	IPB (Light)	AAC / Linea PCM		

Movie recording size

	Resolution	Aspect ratio	Frame rate (fps)		Video compression format	Audio compression format
			NTSC	PAL		
4K	3840×2160 (UHD)	16:9	29.97 23.98	25.00	IPB (Standard) IPB (Light)	AAC Linear PCM
4K (cropped)*1			59.94	50.00	IPB (Standard) IPB (Light)	AAC Linear PCM
4K time-lapse movies*5			29.97*2	25.00*2	ALL-I	
Full HD High Frame Rate movies*3	1920×1080		119.88*4	100.00*4	IPB (Standard) IPB (Light)	
Full HD			59.94	50.00	IPB (Standard) IPB (Light)	AAC Linear PCM
			29.97 23.98	25.00		
Full HD time-lapse movies*5			29.97*2	25.00*2	ALL-I	
Creative filters*6			29.97 23.98	25.00	IPB (Standard) IPB (Light)	AAC Linear PCM

* 1: 4K 59.94 / 50.00 fps will result in cropped shooting.
* 2: Playback frame rate.
* 3: No audio is recorded for High Frame Rate movies.
* 4: Recording frame rate.
* 5: No audio is recorded for time-lapse movies.
* 6: No audio is recorded for miniature effect movies.

Color sampling method

Recording format		Internal recording		HDMI output	
		Color sampling	Color space	Color sampling	Color space
4K / Full HD	8 bits	YCbCr 4:2:0	BT.709	YCbCr 4:2:0	BT.709
	Canon Log 3 10 bits	YCbCr 4:2:2	BT.709	YCbCr 4:2:2	BT.709
			BT.2020		BT.2020*1
			Cinema Gamut		
	HDR PQ 10 bits	YCbCr 4:2:2	BT.2100 (PQ)	YCbCr 4:2:2	BT.2100 (PQ)*2

* 1: When connected to a BT.2020 monitor.
* 2: When connected to an HDR display supported monitor.

Built-in microphone: Stereo microphones

Estimated recording time, movie bit rate, and file size
Canon Log: OFF, HDR PQ: OFF

Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compression method	32 GB	128 GB	512 GB		
	NTSC	PAL						
4K (cropped)	59.94	50.00	IPB (Standard)	18 min.	1 hr. 14 min.	4 hr. 56 min.	230	1647
			IPB (Light)	35 min.	2 hr. 21 min.	9 hr. 27 min.	120	861
4K	29.97 23.98	25.00	IPB (Standard)	35 min.	2 hr. 21 min.	9 hr. 27 min.	120	861
			IPB (Light)	1 hr. 10 min.	4 hr. 43 min.	18 hr. 52 min.	60	432
Full HD High Frame Rate movies	119.88	100.00	IPB (Standard)	35 min.	2 hr. 22 min.	9 hr. 28 min.	120	859
			IPB (Light)	1 hr. 00 min.	4 hr. 3 min.	16 hr. 15 min.	70	501
Full HD	59.94	50.00	IPB (Standard)	1 hr. 10 min.	4 hr. 43 min.	18 hr. 52 min.	60	432
			IPB (Light)	2 hr. 1 min.	8 hr. 4 min.	32 hr. 15 min.	35	253
	29.97 23.98	25.00	IPB (Standard)	2 hr. 20 min.	9 hr. 23 min.	37 hr. 35 min.	30	217
			IPB (Light)	5 hr. 47 min.	23 hr. 11 min.	92 hr. 47 min.	12	88
4K time-lapse movies	29.97	25.00	ALL-I	9 min.	36 min.	2 hr. 25 min.	470	3362
Full HD time-lapse movies	29.97	25.00	ALL-I	47 min.	3 hr. 9 min.	12 hr. 38 min.	90	644

* Bit rate only applies to video output, not audio or metadata.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* 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) or IPB (Light). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.

Canon Log: ON, or HDR PQ: ON

Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compres-sion method	32 GB	128 GB	512 GB		
	NTSC	PAL						
4K (cropped)	59.94	50.00	IPB (Standard)	12 min.	50 min.	3 hr. 20 min.	340	2434
			IPB (Light)	25 min.	1 hr. 40 min.	6 hr. 40 min.	170	1218
4K	29.97 23.98	25.00	IPB (Standard)	25 min.	1 hr. 40 min.	6 hr. 40 min.	170	1218
			IPB (Light)	50 min.	3 hr. 20 min.	13 hr. 20 min.	85	610
Full HD High Frame Rate movies	119.88	100.00	IPB (Standard)	23 min.	1 hr. 34 min.	6 hr. 19 min.	180	1288
			IPB (Light)	42 min.	2 hr. 50 min.	11 hr. 22 min.	100	716
Full HD	59.94	50.00	IPB (Standard)	47 min.	3 hr. 9 min.	12 hr. 36 min.	90	646
			IPB (Light)	1 hr. 24 min.	5 hr. 39 min.	22 hr. 38 min.	50	360
	29.97 23.98	25.00	IPB (Standard)	1 hr. 34 min.	6 hr. 17 min.	25 hr. 8 min.	45	324
			IPB (Light)	2 hr. 30 min.	10 hr. 3 min.	40 hr. 15 min.	28	203
4K time-lapse movies	29.97	25.00	ALL-I	9 min.	36 min.	2 hr. 25 min.	470	3362
Full HD time-lapse movies	29.97	25.00	ALL-I	31 min.	2 hr. 6 min.	8 hr. 25 min.	135	966

* Bit rate only applies to video output, not audio or metadata.
* When [**Audio format**: **AAC/16bit/2CH**] is set.
* 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) or IPB (Light). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.

Card performance requirements (movie recording) [write/read speed]

Movie recording size				SD card	
Resolution	Frame rate (fps)		Compression method	8 bits	10 bits (HDR PQ)
	NTSC	PAL			
4K (cropped)	59.94	50.00	IPB (Standard)	UHS Speed Class 3 or higher	Video Speed Class V60 or higher
			IPB (Light)	UHS Speed Class 3 or higher	
4K	29.97 23.98	25.00	IPB (Standard)	UHS Speed Class 3 or higher	
			IPB (Light)	SD Speed Class 10 or higher	UHS Speed Class 3 or higher
Full HD High Frame Rate movies	119.88	100.00	IPB (Standard)	UHS Speed Class 3 or higher	
			IPB (Light)	SD Speed Class 10 or higher	UHS Speed Class 3 or higher
Full HD	59.94	50.00	IPB (Standard)	SD Speed Class 10 or higher	UHS Speed Class 3 or higher
			IPB (Light)	SD Speed Class 6 or higher	SD Speed Class 10 or higher
	29.97 23.98	25.00	IPB (Standard)	SD Speed Class 6 or higher	
			IPB (Light)	SD Speed Class 4 or higher	
4K time-lapse movies	29.97	25.00	ALL-I	Read speed of 60 MB/sec. or higher	
Full HD time-lapse movies	29.97	25.00	ALL-I	Read speed of 30 MB/sec. or higher	

Auto stopping of movie recording

Maximum recording time per recording

High Frame Rate: Disable	59.94 fps or less	Maximum: 6 hr. 00 min. 00 sec.
High Frame Rate: Enable	119.88 / 100.00 fps	Maximum: 1 hr. 30 min. 00 sec.

* Longest time available per recording.
* Except when recording stops from overheating or due to the power source used, errors, or other reasons.

Autofocus (AF)

Focusing method: Dual Pixel CMOS AF

Focusing brightness range

Still photo shooting
WIDE: EV -4.0–20, TELE: EV -2.0–20
* Center AF point, One-Shot AF, at room temperature, ISO 100.

Movie recording
4K 30p / Full HD 30p
WIDE: EV -2.0–20, TELE: EV 0–20
* Center AF point, One-Shot AF, at room temperature, ISO 100, and 29.97 / 25.00 fps

Focusing operation

	Still photo shooting	Movie recording
AF operation	• One-Shot AF • AI Focus AF • Servo AF	• Movie Servo AF
Manual focus (MF)	Supported	Supported

* When set to AI Focus AF, the camera automatically switches from One-Shot AF to Servo AF in response to subject movement (also applies during continuous shooting).
* Automatically set to [**AI Focus AF**] in < A+ > mode.

Focusing area
Still photo

Still photo cropping/aspect ratio	AF area	
	Width	Height
3:2 (aspect ratio)	Approx. 90%	Approx. 90%
1.4× (crop)*1*2	Approx. 100%	Approx. 100%

* May not be possible to move AF points to the edge of the screen under some scene and subject conditions.
* 1: AF area corresponding to a 1.4x crop image area.
* 2: With the camera set to Whole area AF, or with subject detection if Whole area AF is not set.

Movie

Movie cropping	AF area	
	Width	Height
4K	Approx. 90%	Approx. 100%
4K (cropped)*1*2	Approx. 100%	Approx. 100%
Full HD	Approx. 90%	Approx. 100%

* May not be possible to move AF points to the edge of the screen under some scene and subject conditions.
* At an aspect ratio of 16:9.
* 1: AF area corresponding to the 4K (cropped) image area.
* 2: With the camera set to Whole area AF, or with subject detection if Whole area AF is not set.

Number of AF area available for automatic selection

Number of AF zones	Still photos	Max. 425 zones (25×17)
	Movies	Max. 375 zones (25×15)

* Focusing area: Horizontal: approx. 90%, Vertical: approx. 90%
* May vary depending on settings.

Selectable positions for AF point

Numbers of positions	Still photos	Max. 3431 positions (73×47)
	Movies	Max. 3139 positions (73×43)

* Focusing area: Horizontal: approx. 90%, Vertical: approx. 90%
* When set to 1-point AF and selected using the cross keys in focusing selection mode.
* Values for the selectable positions for AF points do not represent AF performance.

Screen/Display settings

Type: TFT color LCD screen
Screen size: Approx. 7.5 cm (3.0 inch) (screen aspect ratio of 3:2)
Dot count: Approx. 1,040,000 dots
Angle of view: Approx. 170° vertically and horizontally
Coverage: Approx. 100% vertically and horizontally (at L image size and an aspect ratio of 3:2)
Touch-screen: Capacitive sensing

HDMI output

Output terminal: HDMI output terminal (Type D)
* HDMI CEC not supported.

Exposure control

Metering functions under various shooting conditions

Item		Still photo shooting	Movie recording
Metering sensor		Based on the image sensor output signals	
		384-zone (24×16) metering*1	384-zone (24×16) metering*1
Metering mode	Evaluative metering	○	○
	Spot metering*2	○ * Approx. 3.1% in the center of the screen*3	
	Center-weighted average	○	—
Metering brightness range (at room temperature, ISO 100)		EV -1 to 20	EV 1 to 20

* 1: Same applies when [**1.4x (crop)**] is set.
* 2: Multi-spot metering not available (not supported).
* 3: When [**3:2 (aspect ratio)**] is set. Same applies when set to [**1.4x (crop)**].

ISO speed (recommended exposure index) in still photo shooting

Manual ISO speed setting for still photos

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

* When set to [**Highlight tone priority**], the available manual setting range is ISO 200–32000.
* Expanded ISO speeds are not available when [**HDR shooting (PQ)**: **Enable**] is set.

Manual ISO speed setting range for still photos

ISO speed range	ISO speed
Minimum	ISO 100–32000
Maximum	ISO 200–H (equivalent to ISO 51200)

ISO Auto setting range for still photos

Auto range	ISO speed
Minimum	ISO 100–25600
Maximum	ISO 200–32000

ISO Auto details for still photos

Shooting mode		No flash	Using flash
Creative Zone	P / Tv / Av / M (other than bulb)	ISO 100*1*2–32000*2	ISO 100*1*2–1600*2
	M (bulb)	ISO 400*3	ISO 400*3
Basic Zone		ISO 100–6400	ISO 100–1600
	SCN	Varies by shooting mode	
		Varies by shooting mode	

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

ISO speed (recommended exposure index) in movie recording

Manual ISO speed setting for movies (in M mode)

	Canon Log 3	ISO speed
Normal ISO speed	Off	ISO 100–12800 (in 1/3- or 1-stop increments)
	On	ISO 800–12800 (in 1/3- or 1-stop increments)
Expanded ISO speed	Off	H (equivalent to ISO 16000, 20000, or 25600)
	On	L (equivalent to ISO 100, 125, 160, 200, 250, 320, 400, 500, or 640) H (equivalent to ISO 16000, 20000, or 25600)

* Maximum ISO speed when set manually corresponds to the [**ISO speed range**] setting.
* When set to [**Highlight tone priority**], the setting range is ISO 200–12800.
* [**Highlight tone priority**] is not available when Canon Log 3 is set.
* Expanded ISO speeds are not available in Highlight tone priority or HDR PQ movie recording, in movie recording with shooting creative filters, or with digital zoom.
* The default setting range when set to Canon Log 3 is L and ISO 800–12800.

Automatic ISO speed setting for movies (in P / Tv / Av mode, and in M mode with ISO Auto)

	Canon Log 3	ISO speed
Normal ISO speed	Off	ISO 100–12800 (in 1/3- or 1-stop increments)
	On	ISO 800–12800 (in 1/3- or 1-stop increments)
Expanded ISO speed	Off	H (equivalent to ISO 16000, 20000, or 25600)
	On	

* Maximum ISO speed when set automatically corresponds to the [**Max for Auto**] setting.
* When set to [**Highlight tone priority**], the setting range is ISO 200–12800.
* Expanded ISO speeds are not available in Highlight tone priority or HDR PQ movie recording, in movie recording with shooting creative filters, or with digital zoom.

Manual ISO speed setting range for movies

ISO speed range	ISO speed
Minimum	ISO 100–12800 (in 1-stop increments)
Maximum	ISO 200–12800 or H (equivalent to ISO 25600), in 1-stop increments

Maximum ISO Auto setting for movies

	ISO speed
Max for Auto	ISO 6400, 12800, or H (equivalent to ISO 25600), in 1-stop increments

Maximum ISO auto setting for time-lapse movies

	ISO speed
Max for Auto	ISO 400–12800 (in 1-stop increments)

Shutter

Still photo shooting

Type:
Electronically controlled lens shutter
Rolling shutter, using the image sensor

Shutter mode

Shutter mode	Flash photography
Mechanical shutter	Possible
Electronic shutter	Disabled

Shutter speed

Shutter mode	Setting range
Mechanical shutter	1/2000–30 sec. (1/3-stop increments), bulb
Electronic shutter*1	1/16000*2, 1/8000–30 sec. (1/3-stop increments), bulb

* 1: Shutter speeds of faster than 1/8000 sec. are only available in Tv or M mode (up to 1/8000 sec. in P or Av mode).
* 2: Maximum shutter speed when shooting with focus bracketing is 1/8000 sec.

Flash sync speed

Shutter mode	Flash sync speed		
	EL/EX Speedlite		Non-Canon flash unit
	Other than those listed to the right	1.4x (crop)	
Mechanical shutter	1/250 sec.		

Movie recording

Type: Rolling shutter, using the image sensor

Shutter speed: 1/8000*1–1/25*2*3 sec. (1/3-stop increments)
Movies in Tv or M mode: 1/8000*1–1/8*2*3 sec. (1/3-stop increments)

* 1: Maximum of 1/4000 sec. in time-lapse movie shooting.
* 2: In normal movie recording, the minimum speed varies depending on the recording mode and frame rate.
* 3: Minimum speed is 1/125 sec. (NTSC) or 1/100 sec. (PAL) when the frame rate is set to 119.88 / 100.00 fps.

Image Stabilizer features

Lens optical IS

Drive

Drive mode and continuous shooting speed

[Max. approx.]

Drive mode	AF operation	Mechanical shutter	Electronic shutter
Single shooting		Yes	Yes
High-speed continuous shooting +	One-Shot AF AI Focus AF Servo AF	15 shots/sec.	30 shots/sec.
High-speed continuous shooting	One-Shot AF AI Focus AF Servo AF	8.2 shots/sec.	16 shots/sec.
Low-speed continuous shooting	One-Shot AF AI Focus AF Servo AF	3.0 shots/sec.	5.0 shots/sec.
Self-timer: 10 sec.		Yes	Yes
Self-timer: 2 sec.		Yes	Yes
Self-timer: Continuous		Yes	Yes

External flash

Contacts for multi-function shoe: 21-pin
Flash exposure compensation: ±3 stops (in 1/3-stop increments)

Frame grab from 4K movies

Individual frames of 4K movies recorded with the camera can be saved as approx. 8.3-megapixel (3840×2160) still photos (JPEG or HEIF).
* From normal movies, still photos are saved as JPEGs, and from HDR PQ movies, as HEIF images.
* Extraction is not possible from Canon Log 3 movies.
* In-camera resizing or cropping is not supported for extracted still photos, and these images cannot be edited with Creative filters or Creative Assist.

Print order (DPOF)

Compliant with DPOF Version 1.1

External interface

Digital terminal

Terminal type	USB Type-C™
Transmission	Equivalent to Hi-Speed USB (USB 2.0)
Applications	• For computer communication / smartphone communication • USB battery charging / camera power supply * USB PD not supported.

HDMI output terminal: HDMI terminal (Type D)
* Resolution switches automatically.
* HDMI CEC not supported.
External microphone input terminal: 3.5 mm diameter stereo mini jack (3-pin)
* Stereo Microphone DM-E100 is recommended if plug-in power will be used.
Headphone terminal: 3.5 mm diameter stereo mini jack

Power source

Battery

Compatible battery packs	LP-E17
Quantity used	1

USB charging time

The in-camera charging time with USB Power Adapter PD-E2 is as follows.

Battery	Charging time*1	Measurement conditions*2
LP-E17	Approx. 2 hr.	Room temperature*3 New battery Using USB Power Adapter PD-E2

* 1: To fully recharge a completely depleted battery (unless over-discharged; details conform to Canon testing standards).
* 2: The charging time required and the amount charged vary depending on ambient temperature and remaining capacity.
* 3: Charging is possible in a range of 5–40°C / 41–104°F. For safety, charging takes longer in colder environments (5–15°C / 41–59°F).

Number of shots available

Shooting method	Temperature	Available shots (approx.)	
		Power saving*1	Smooth*2
On-screen shooting	+23℃ / 73°F	400	340

* 1: Based on CIPA standards.
* 2: According to Canon measurement conditions, which are based on CIPA standards.
* With a new, fully charged LP-E17.
* The number of shots available may vary greatly depending on the shooting environment.
* Fewer shots may be available with a compatible accessory attached to the multifunction shoe, because the camera powers the accessory.

Available operating time

Conditions of use			Temperature	Available operating time
Time available for movie recording*1	4K (cropped)	• 59.94 / 50.00 fps • IPB (Light)	+23°C / 73°F	Approx. 1 hr. 5 min.
			0°C / 32°F	Approx. 1 hr.
	4K	• 29.97 / 25.00 fps • IPB (Standard)	+23°C / 73°F	Approx. 1 hr. 10 min.
			0°C / 32°F	Approx. 1 hr. 5 min.
	Full HD	• 59.94 / 50.00 fps • IPB (Standard)	+23°C / 73°F	Approx. 1 hr. 25 min.
			0°C / 32°F	Approx. 1 hr. 20 min.
Time available for movie playback (normal playback)	4K	• 59.94 / 50.00 fps • IPB (Light)	+23°C / 73°F	Approx. 3 hr.

* With a new, fully charged LP-E17.
* 1: When [**Movie Servo AF**: **Disable**] is set.

Dimensions and weight

Dimensions

(W)×(H)×(D)	Approx. 118.3×68.0×52.5 mm / 4.66×2.68×2.07 in.

* Based on CIPA guidelines.

Weight

Body (including battery and card) * Based on CIPA guidelines.	Approx. 426 g / 15.03 oz.
Body only	Approx. 379 g / 13.37 oz.

* Does not include shoe cover or windscreen.

Operating environment

Operating temperature: 0–40°C / 32–104°F
Operating humidity: 10–90%

Wi-Fi (wireless LAN)

Supported standards (equivalent to IEEE 802.11b/g/n standards)

Wi-Fi standards (equivalent)	Transmission method	RU TYPE	Maximum link speed
			2.4 GHz band
IEEE 802.11n	OFDM modulation (CSMA / CA)	—	72 Mbps
IEEE 802.11g			54 Mbps
IEEE 802.11b	DSSS modulation	—	11 Mbps

Transmission frequency (Center frequency)

2.4 GHz band

Frequency	2412 to 2462 MHz
Channels	1 to 11 ch

Authentication and data encryption methods

2.4 GHz band

Connection method	Authentication	Encryption
Camera access point	WPA2 / WPA3-Personal	AES
	Open	Disable
Infrastructure	Open	WEP
		Disable
	Shared key	WEP
	WPA / WPA2 / WPA3-Personal	TKIP AES

Bluetooth

Standards compliance: Bluetooth Specification Version 4.2 compliant (Bluetooth Low Energy technology)
Transmission method: GFSK modulation

- All data above is based on Canon testing standards and CIPA (Camera & Imaging Products Association) testing standards and guidelines.
- Dimensions and weight listed above are based on CIPA Guidelines (except weight for camera body only).
- Product specifications and appearance are subject to change without notice.