Canon

EOS R3

Type	
Type	Digital single-lens non-reflex AF/AE camera
Image Processor	DIGIC X
Recording Media	CFexpress card • Type B: Card slot SD card • SD card speed class-compatible. • Compatible with UHS-II • Eye-Fi cards and Multimedia cards (MMC) are not supported.
Compatible Lenses	Canon RF lens group 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	Full-frame back-illuminated stacked CMOS sensor (compatible with Dual Pixel CMOS AF)
Effective Pixels	Approx. 24.1 megapixels
Sensor Size	Approx. 36.0 x 24.0 mm
Pixel Size	Approx. 6.00 µm square
Total Pixels	Approx. 26.7 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 • Removes dust adhering to the low-pass filter. • At power off only / Enable / Disable. Performed automatically (taking about approx. 2 sec. as indicated on the screen) or manually (taking about approx. 8 sec. as indicated on the screen). • After manually activated cleaning, the camera will automatically restart (Power OFF to ON). • When [Multi Shot Noise Reduction], [Multiple exposures], or [HDR mode] is set, [Clean now] and [Clean manually] cannot be selected. (2) 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 Canon Digital Professional Software (v. 4.14 and higher) to automatically erase the dust spots. • Not available with EF-S lenses, in cropped shooting or multi-exposure shooting. (3) Manual cleaning (by hand)

Recording System	
Recording Format	Compliant to Design rule for Camera File system 2.0 and Exif 2.31*. *Supports time difference information
Image Format	JPEG, HEIF, RAW (CR3, 14 bit RAW format), C-RAW (Canon original); Movies: ALL-I, IPB (Std.), IPB (Light), RAW (Std.), RAW (Light)
HDR Mode- Continuous Shooting	(1) 1 shot only (2) Continuously (3) Multiple Exposure
Advanced shooting operations	(1) Focus Bracketing (firmware 1.2.0 or higher) • In-Camera Depth composite • Adds Focus bracketing and depth compositing with a flash (Speedlite EL-1) (2) Interval Timer (3) Bulb Timer (4) Multi-Shot NR (5) Time-lapse movies
File Size	3:2 Aspect Ratio Large/RAW/C-RAW: 6000 x 4000 Medium: 3984 x 2656 Small 1: 2976 x 1984 Small 2: 2400 x 1600 1.6x (Crop)* Large/RAW/C-RAW: 3744 x 2496 Small 2: 2400 x 1600 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 • Values for Recording Pixels are rounded to the nearest 100,000. • RAW/C-RAW images are generated in [3:3], and the set aspect ration is appended. • JPEG images are generated in the set aspect ratio. • These aspect rations (Medium / Small 2 / Small 2) and pixel counts also apply to resizing. * Effective lens focal length 1.6x marked focal length

File Numbering	The following file numbers can be set: 1. File numbering methods a. Continuous numbering i. The numbering of captured images continues even after you replace the card. b. Auto reset i. When you replace or format 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. 2. Manual reset a. Resets the file number to 0001, and creates a new folder automatically. * When manually resetting the file number, folders can also be renamed.
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 (2) Standard (3) Portrait (4) Landscape (5) Fine Detail (6) Neutral (7) Faithful (8) Monochrome (9) User Defined 1–3 • In Scene Intelligent Auto, [Auto] will be set automatically. • [Standard] is the default setting for [User Def. 1–3].
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) (9) Color temperature (user-set from 2500K ~ 10000K) * Effective also in twilight and sunset.
Auto White Balance	Option between ambience priority and white priority settings.
White Balance Shift	Blue/amber bias: ±9 levels Magenta/green bias: ±9 levels * Shifted from the color tempurate of the current WB mode. * Blue/amber and magenta/green shift can be set at the same time.
Viewfinder	
Type	OLED color electronic viewfinder; approx. 5.76 million dots resolution
Coverage	Approx. 100% vertically and horizontally relative to the shooting image area (with image quality L, at approx. 23mm eyepoint).
Magnification / Angle of View	Approx. 0.76x / Approx. 35.7 degrees (with 50mm lens at infinity, -1 m^{-1})
Eye Point	Approx. 23mm (at -1 m^{-1} from the eyepiece lens end)

Dioptric Adjustment Range	Approx. -4.0 to + 2.0 m^{-1} (dpt)
Viewfinder Information	(1) Maximum burst (2) Possible shots/Sec. until self-timer shoots (3) Focus Bracketing/ Multiple-exposure/HDR shooting/Multi Shot Noise Reduction/Bulb time/Interval timer (4) Shooting mode (5) AF area (6) AF operation (7) Card (8) Image quality (9) Drive mode (10) Metering mode (11) Accessory compatible with the multi-function shoe attached (12) No. of remaining shots for focus bracketing, multiple exposures, or interval timer (13) Movie recording time available (14) Battery level (15) Image Stabilizer (IS mode) (16) Histogram (Brightness/RGB) (17) Set AF point to center (18) Quick Control button (19) Anti-flicker shooting (20) White balance/White balance correction (21) Picture style (21) Auto Lighting Optimizer (22) Subject to deter (23) Still photo cropping / Aspect ratio (24) Wi-Fi® signal strength (25) Bluetooth® function (26) Electronic level (27) AF point (Flexible Zone AF 1) (28) Wi-Fi® function (29) Airplane mode (29) AEB/FEB (30) View Assist (31) HDR PQ (32) Flash ready / FE lock / High-speed sync (33) Electronic shutter (34) Touch shutter / Create folder (35) AE lock (36) Shutter speed / Multi-function lock warning (37) Aperture value (38) Overheating warning (39) Still photo image quality warning (40) Focal length (41) Display simulation (42) Magnify button (43) ISO speed (44) Highlight tone priority (45) Exposure compensation (46) Exposure level indicator
Autofocus	
Focus Method	Dual Pixel CMOS AF
Number of AF zones available for Automatic Selection	AF area: Horizontal: Approx. 100% x Vertical: Approx. 100% Stills: Max. 1053 zones (39 x 27) Movies: Max. 819 zones (39 x21)

<table>
<tr><td>Focusing brightness range (still photos)</td><td>EV -7.5 to 20 (f/1.2 lens*, center AF point, One-Shot AF, at 73°F/23°C, ISO 100)
* Except RF lenses with a Defocus Smoothing (DS) coating.</td></tr>
<tr><td>Focusing brightness range
(in movie recording)</td><td>EV -4.5 to 20 (f/1.2 lens*, center AF point, One-Shot AF,at 73°F/23°C, ISO 100, and 29.97 fps.)
* Except RF lenses with a Defocus Smoothing (DS) coating.</td></tr>
<tr><td>AF Area</td><td>
<table>
<tr><th colspan="2">AF Area</th></tr>
<tr><td>Spot AF</td><td>Flexible Zone AF 1</td></tr>
<tr><td>1-point AF</td><td>Flexible Zone AF 2</td></tr>
<tr><td>Expand AF Area
(Above, below, left and right/Around)</td><td>Flexible Zone AF 3</td></tr>
<tr><td>Expand AF Area
(Around)</td><td>Whole area AF</td></tr>
</table>

Default settings for Flexible Zone AF 1/AF 2/AF 3 are the same as previous Zone AF, Large Zone AF Vertical, and Large Zone AF Horizontal, respectively.
Except when Whole are AF is used, a dot is displayed in the center of any AF Area (or Flexible Zone AF area) in the center of the screen.
In still photo shooting, regardless of the AF area setting when Servo AF is used with [Subject Tracking: On] set, AF is performed using [Whole area AF]. [Subject Tracking: Off] should be set if users wish AF to be performed at their preferred position when Aervo AF is used, as on previous models.

</td></tr>
<tr><td>Subject to Detect</td><td>People, Animals, Vehicles, No Priority</td></tr>
<tr><td>Eye Control</td><td>On / Off

The area where eye control is supported corresponds to the area in the viewfinder's field of view available for AF (AF Area)
Eye control is not available during magnified display or manual focusing. (The focus guide frame can be moved.)
<SET> button can be used to activate and deactivate eye control.
If users move their eye away from the viewfinder, when their line of sight is not detected, subject detection and focusing is based on [Subject to detect] and [AF area] settings.
Continuous shooting at up to approx. 30 shots/sec. is supported.
</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])
(1) Evaluative metering
(2) Partial metering (approx. 5.9% of the area at the center of the screen)
(3) Spot metering (approx. 2.9% of the area at the center of the screen)
(4) Center-weighted average metering</td></tr>
<tr><td>Metering Range</td><td>EV -3 – 20 (at 73°F/23°C, ISO 100) (Still Photo Shooting)</td></tr>
<tr><td>Exposure Control Modes</td><td>(1) Scene Intelligent Auto
(2) Flexible-priority AE (Fv)
(3) Program AE (P)
(4) Shutter-priority AE (Safety shift possible) (Tv)
(5) Aperture-priority AE (Safety shift possible) (Av)
(6) Manual exposure (M)
(7) Bulb
(8) Custom shooting mode C1, C2, C3</td></tr>
</table>

ISO Speed Range

Available ISO speeds; user-set

Normal	ISO 100–102400 (in 1/3- or 1-stop increments)
Expanded	L: equivalent to ISO 50, H: equivalent to 204800

- When set to [Highlight tone priority], the available manual setting range is ISO 200 to 102400.
- 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 (50)–51200 (in 1-stop increments)
Maximum	ISO 100–H (102400) (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 100–51200 (in 1-stop increments)
Maximum	ISO 200–102400 (in 1-stop increments)

ISO Auto details in still photo shooting

Shooting mode	No Flash	Using Flash
P	ISO 100*1*2-102400*2	ISO 100*1*2–6400*2*□
TV		
AV		
M		
BULB	ISO 400*3	

* 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.
* 4: ISO 1600 when using a lens that is not compatible with “Variable control of maximum ISO Auto limit for E-TTL”.

Exposure Compensation

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
- (via C.Fn Menu #2 — AE lock meter. mode after focus) AE is locked after completion of One-Shot AF, in user's choice of Evaluative, Partial, Spot, and/or Center-weighted metering.

(2) Manual AE lock
- Use the AE lock button (update by pressing the button again) in Fv, P, Tv, Av, and M mode.
- Enabled in all metering modes.
- Options to cancel locked reading via Customizing Buttons — AE Lock with Hold, or Release AE Lock.

Shutter

Type

(1) Mechanical
(2) Electronic 1st-Curtain
(3) Electronic Shutter (1st and 2nd curtain - silent*)

- When set to [Electronic], the camera makes no mechanical shutter sound. Shutter volume during Electronic Shutter is adjustable in 5 user-defined steps, plus silent — Set-up Menu #2 > Volume. Electronic Shutter sound is also disabled when Beep is set to Disable — Set-up Menu #2 > Beep. Note that the camera may make sounds other than the shutter release sound, such as sounds for aperture adjustment or the lens focus drive, or beeps. Moreover, using long exposure noise reduction with shutter speeds of 1 sec. or longer involved mechanical shutter, which producers a mechanical sound.
- Bands of light may be displayed and captured images may be affected by light and dark banding when shooting under fluorescent lighting or other flickering light sources with the camera set to [Anti-flicker shoot: Disable]
- The following settings are available when [Electronic] is set:
- Drive mode selection (H+ / H / L), shooting with an external flash unit, anti-flicker shooting, shutter speed (no low-speed restrictions), long exposure noise reduction, AEB, Multi Shot Noise Reduction, HDR Shooting (HDR PQ), HDR mode, multiple exposures.
- M or Tv modes, with Electronic Shutter: user-set shutter speeds extend to 1/64,000 sec. maximum. (Set in full-step increments from 1/8000 to 1/64000).

Shutter Speeds

Mechanical Shutter / Electronic 1st-curtain	1/8000 to 30 sec. (in 1/3- or 1/2-stop increments) bulb
Electronic Shutter	1/64000 sec., 1/32000 sec., 1/16000 sec., 1/12800 sec., 1/10000 sec., 1/8000 sec. to 30 sec. (in 1/3- or 1/2-stop incremements), bulb

- In electronic shutter shooting, shutter speeds of 1/10000 sec. or faster are only available in Tv or M mode (up to 1/8000 sec. in Fv, P, or Av mode).
- Adjustments by the camera when the shutter speed is set to 1/64000 or 1/32000 sec. in electronic shutter shooting may involve the aperture value or ISO speed in some shooting conditions, because shutter speed cannot be controlled in 1/3- or 1/2-stop increments.
- If HDR mode, Focus bracketing, Hi-speed sync, or Same exposure for new aperture is set, max shutter speed limit will be 1/8000 sec.

X-sync Speed

Mechanical Shutter: 1/200 sec.
Elec. 1st-curtain: 1/250 sec.
Electronic Dhutter: 1/180 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 *With SW-1 ON and ready, from SW-2 ON until start of exposure	Approx. 76 ms	Approx. 50 ms	Approx. 50 ms
*With shutter-release time lag set[*1, *2]	Approx. 76 ms	Approx. 36 ms[*3]	Approx. 20 ms[*4]

*Based on Canon testing standards. Flash not used.
*The shutter-release time lag is longer in flash photography with anti-flicker shooting.
*1: Using RF or EF lenses (except EF-S lenses)
*2: At maximum aperture.
*3: Using EF-S lenses and electronic 1st-curtain: approx. 45 ms.
*4: Using EF-S lenses and the electronic shutter: approx. 35 ms.

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 EF/RF lenses

Lens		Pitch/YAW	X/Y	Roll
EF	Without IS	In-body IS	In-body IS	In-body IS
	Optical IS	Optical IS	In-body IS	In-body IS
	Hybrid IS	Optical IS	Still: Optical IS Movie: In-body IS	In-body IS
RF	Without IS	In-body IS	In-body IS	In-body IS
	Optical IS	Coordinated Control* Optical IS+In-body IS	In-body IS	In-body IS
	Hybrid IS	Coordinated Control* Optical IS+In-body IS	Still: Optical IS Movie: In-body IS	In-body IS

* As of July 2021. Except RF600mm F11 IS STM and RF800mm F11 IS STM

EOS R3 coordinated In-Body Image Stabilizer Still Shooting performance with RF lenses

Lens	Coordinated Control IS	Focal Length	IS stop (CIPA Standard)
RF24-105mm F4 L IS USM	Yes	105mm	8.0
RF35mm F1.8 MACRO IS STM	Yes	35mm	7.0
RF24-70mm F2.8 L IS USM	Yes	70mm	8.0
RF15-35mm F2.8 L IS USM	Yes	35mm	7.0
RF24-240mm F4-6.3 IS USM	Yes	240mm	6.5
RF70-200mm F2.8 L IS USM	Yes	200mm	7.5
RF24-105mm F4-7.1 IS STM	Yes	105mm	8.0
RF100-500mm F4.5-7.1 L IS USM	Yes	500mm	6.0
RF85mm F2 MACRO IS STM	Yes	85mm	8.0
RF50mm F1.2L USM	-	50mm	7.0
RF28-70 F2 L USM	-	70mm	8.0
RF85mm F1.2 L USM	-	85mm	8.0
RF85mm F1.2 L USM DS	-	85mm	8.0

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)
(2) Evaluative
(3) Average

Slow Sync (P/Av modes)

Item	Shutter Speed		
	Mechanical Shutter	Electronic 1st Curtain	Electronic Shutter
1/xxx-30 sec. auto	1/200-30 sec.	1/250-30 sec.	1/180-30 sec.
1/xxx-1/60 sec. auto	1/200-1/60 sec.	1/250-1/60 sec.	1/180-1/60 sec.
1/xxx sec. (fixed)	1/200 sec.	1/250 sec.	1/180 sec.

*Setting items vary by shutter mode setting
*Flash photography is supported with the shutter mode set to [Electronic].

Flash Function Menu

Provided for EX- and EL-series Speedlites

Flash Exposure Compensation

±3 stops in 1/3- or 1/2-stop increments. Can be set on speedlite, in camera's External Speedlite Control Menu, or on camera body.

Continuous flash control

1. E-TTL each shot (E-TTL flash exposure fixed after first shot in a sequence)
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[1,2,3]	One-Shot AF	Approx. 12 shots/sec.		Max. Approx. 30 shots/ sec.
	Servo AF			
High-speed Continuous shooting[4,5]	One-Shot AF	Approx. 6.0 shots/sec.	Approx. 8.0 shots/sec.	Max. Approx. 15 shots/ sec.
	Servo AF			
Low-speed Continuous Shooting	One-Shot AF	Approx. 3.0 shots/sec.		
	Servo AF			
Custom High-Speed Continuous (firmware 1.2.0 or higher)	One-shot AF[6]	Not Available	No	Adjustable Approx. 30 - 195 fps
	Servo AF[6]			
Self-timer:10 sec / remote control		Yes		
Self-timer:2 sec / remote control		Yes		

1. AE, flash metering, and white balance are fixed after the first frame when using High-speed continuous shooting+, flash, and mechanical/electronic first-curtain shutter.
2. When set to [High-speed continuous shooting+], the continuous shooting speed in flash photography (with flash metering between shots) is up to approx. 15 shots/sec. Flash metering between shots is not supported with mechanical shutter or electronic first-curtain. Without flash meter between shots, the continuous shooting speed with flash is up to approx. 20 shots/sec. with the elctronic shutter. Note that the maximum of approx. 15 shots/sec. with the electronic shutter is only available when using EL or EX Speedlites released in or after 2007 (except 430EX II, 90EX, 320EX or 580 EXII)
3. The continuous shooting speed in anti-flicker shooting drops to a maximum of approx. 5.4 shots/sec. with mechanical shutter and a maximum of approx. 10 shots/sec. for electronic first-curtain. With electronic shutter, if flicker frequency is 60 Hz, max continuous speed will be approx. 24 shots/sec. and if flicker frequency is 50Hz, max continuous speed will be spprox. 20 shots/sec.
4. The continuous shooting speed in flash photography (with flash metering between shots) drops to a maximum of approx. 4.8 shots/sec. with mechanical shutter and a maximum of approx. 6.8 shots/sec. for electronic first-curtain.
5. The continuous shooting speed in flash photography (with flash metering between shots) drops to a maximum of approx. 5.4 shots/sec. with mechanical shutter and a maximum of approx. 6.6 shots/sec. for electronic first-curtain.
6. Continuous Servo AF is not possible during a Custom high-speed continuous burst. Exposure and AF are locked at the settings used for the first shot in a high-speed sequence.

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

When using the electronic shutter (at 30 fps)

	Image Quality	File Size [Approx. MB]	Possible Shots [Approx.}	Maxiumum Burst [Approx.]		
				SD Card (UHS-I)[1]	SD Card [High-speed] (UHS-II)[2]	CFexpress Card [3]
JPEG	L	8.7	37560	410	530	540
	M	4.7	67860	530	530	530
	S1	3.2	99010	530	530	530
	S2	1.9	163960	530	530	530
HEIF	L	8.1	34800	420	450	460
	M	4.7	59400	560	560	580
	S1	3.4	85030	560	560	590
	S2	1.8	143310	560	570	590
RAW	RAW	29.3	11860	150	150	150
	C-RAW	15.1	24130	320	420	420
RAW+JPG[4]	RAW+L	29.3+8.7	9010	140	150	150
	C-RAW+L	15.1+8.7	14690	260	330	400
RAW+HEIF[5]	RAW+L	29.1+8.1	7970	140	150	150
	C-RAW+L	15.4+8.1	12240	290	290	290

When using the mechanical shutter/electronic first-curtain (at 12 fps)

	Image Quality	File Size [Approx. MB]	Possible Shots [Approx.}	Maxiumum Burst [Approx.]		
				SD Card (UHS-I)[1]	SD Card [High-speed] (UHS-II)[2]	CFexpress Card [3]
JPEG	L	8.7	37560	980	1000 or higher	1000 or higher
	M	4.7	67860	1000 or higher	1000 or higher	1000 or higher
	S1	3.2	99010	1000 or higher	1000 or higher	1000 or higher
	S2	1.9	163960	1000 or higher	1000 or higher	1000 or higher
HEIF	L	8.1	34800	950	1000 or higher	1000 or higher
	M	4.7	59400	1000 or higher	1000 or higher	1000 or higher
	S1	3.4	85030	1000 or higher	1000 or higher	1000 or higher
	S2	1.8	143310	1000 or higher	1000 or higher	1000 or higher
RAW	RAW	29.3	11860	160	290	1000 or higher
	C-RAW	15.1	24130	410	1000 or higher	1000 or higher
RAW+JPG[4]	RAW+L	29.3+8.7	9010	140	140	1000 or higher
	C-RAW+L	15.1+8.7	14690	300	770	1000 or higher
RAW+HEIF[5]	RAW+L	29.1+8.1	7970	150	170	300
	C-RAW+L	15.4+8.1	12240	310	600	600

1. Using 32GB UHS-I SD Card
2. Using 32GB UHS-II SD Card
3. Using 32GB CFexpress card. All cards comply with Canon test standards.

HDR Shooting and Movie Recording

HDR PQ Shooting	Disable / Enable

HDR PQ Shooting - Still

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

Video Shooting

Focusing	Dual Pixel CMOS AF
Exposure Compensation	±3 stops in 1/3- or 1/2-stop increments
Canon Log	Provided (Off / Canon Log 3)

File Format

Standard Movie Recording

Canon Log 3		**OFF**		**ON**
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
Stanrds compliance		Rec.ITU-R BT.709	Rec.ITU-R BT.2100	-
Color gamut		Rec. 709	Rec. 2020	Rec. 709 / Rec. 2020 / Cinema Gamut
Audio	**ALL-I / IPB**	AAC / Linear PCM*		
	IPB (light)	AAC		

* Selection of AAC and Linear PCM is supported [C.Fn 6: Audio compression]

RAW Movie Recording

Canon Log 3	**OFF**		**ON**
HDR PQ	**OFF**	**ON**	**OFF**
Container format	RAW (CRM)		
Bit depth	12 bit		
Audio	Linear PCM		
Simultaneous movie recording (4K DCI)	MP4	MP4 (10 bit)	

Estimated Cumulative Data

Canon Log: Off, HDR PQ: Off

Video Recording Size			Theoretical Time Capacity^			Bit Rate/File Size (approx.)
			64 GB	256 GB	1 TB	
6K RAW	59.94 fps 50.00 fps	RAW	3 min.	13 min.	50 min.	2600 Mbps 18728 MB/min.
		RAW (Light)	4 min.	18 min.	1 hr. 13 min.	1800 Mbps 13006 MB/min.
	29.97 fps 25.00 fps	RAW	4 min.	16 min.	1 hr. 6 min.	2000 Mbps 14376 MB/min.
	24.00 fps 23.98 fos	RAW	5 min.	21 min.	1 hr. 22 min.	1600 Mbps 11503 MB/min.
	29.97 fps 25.00 fps	RAW (Light)	9 min.	37 min.	2 hr. 26 min.	900 Mbps 6508 MB/min.
	24.00 fps 23.98fps	RAW (Light)	11 min.	46 min.	3 hr. 3 min.	720 Mbps 5209 MB/min.
4K DCI	59.94 fps 50.00 fps	ALL-I	8 min.	34 min.	2 hr. 13 min.	1000 Mbps 7164 MB/min.
		IPB	24 min.	1 hr. 39 min.	6 hr. 30 min.	340 Mbps 2443 MB/min.
		IPB (Light)	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps 1227 MB/min.
	29.97 fps 25.00 fps 24.00 fps 23.98 fps	ALL-I	18 min.	1 hr. 12 min.	4 hr. 42 min.	470 Mbps
		IPB	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps
		IPB (Light)	1 hr. 38 min.	6 hr. 34 min.	25 hr. 40 min.	85 Mbps 619 MB/min.
	119.88 fps 100.00 fps	ALL-I	4 min.	18 min.	1 hr. 10 min.	1880 Mbps 13447 MB/min.
4K UHD	59.4 fps 50.00 fps	ALL-I	8 min.	34 min.	2 hr. 13 min.	1000 Mbps
		IPB	24 min.	1 hr. 39 min.	6 hr. 30 min.	340 Mbps
		IPB	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps
	29.97 fps 25.00 fps 23.98 fps	ALL-I	18 min.	1 hr. 12 min.	4 hr. 42 min.	470 Mbps
		IPB	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps
		IPB (Light)	1 hr. 38 min.	6 hr. 34 min.	25 hr. 40 min.	85 Mbps 619 MB/min.
	119.88 fps 100.00 fps	ALL-I	4 min.	18 min.	1 hr. 10 min.	1880 Mbps 13447 MB/min.
Full HD	59.94 fps 50.00 fps	ALL-I	36 min.	2 hr. 27 min.	9 hr. 35 min.	230 Mbps 1656 MB/min.
		IPB	1 hr. 33 min.	6 hr. 12min.	24 hr. 16 min.	90 Mbps 655 MB/min.
		IPB (Light)	2 hr. 45 min.	11 hr. 2 min.	43 hr. 7 min.	50 Mbps 369 MB/min.
	29.97 fps 25.00 fps 23.98 fps	ALL-I	1 hr. 2 min.	4 hr. 9 min.	16 hr. 16 min.	135 Mbps 977 MB/min.
		IPB	3 hr. 3 min.	12 hr. 13 min.	47 hr. 45 min.	45 Mbps 333 MB/min.
		IPB (Light)	5 hr. 1 min.	20 hr. 7 min.	78 hr. 37 min.	28 Mbps 202 MB/min.
	239.76 fps* 200.00 fps*	ALL-I	12 min	50 min	3 hr. 16 min	680 Mbps 4864 MB/min
	119.88 fps 100.00 fps	ALL-I	23 min.	1 hr. 34 min.	6 hr. 10 min.	360 Mbps 2575 MB/min.

Estimated Cumulative Data

Canon Log: On, HDR PQ: On

Video Recording Size			Theoretical Time Capacity^			Bit Rate/File Size (approx.)
			64 GB	256 GB	1 TB	
6K RAW	59.94 fps 50.00 fps	RAW	3 min.	13 min.	50 min.	2600 Mbps
		RAW (Light)	4 min.	18 min.	1 hr. 13 min.	1800 Mbps 13006 MB/min.
	29.97 fps	RAW	4 min.	16 min.	1 hr. 6 min.	2000 Mbps
	24.00 fps 23.98 fos	RAW	5 min.	21 min.	1 hr. 22 min.	1600 Mbps 11503 MB/min.
	29.97 fps 25.00 fps	RAW (Light)	9 min.	37 min.	2 hr. 26 min.	900 Mbps 6508 MB/min.
	24.00 fps 23.98fps	RAW (Light)	11 min.	46 min.	3 hr. 3 min.	720 Mbps 5209 MB/min.
4K DCI	59.94 fps 50.00 fps	ALL-I	8 min.	34 min.	2 hr. 13 min.	1000 Mbps
		IPB	24 min.	1 hr. 39 min.	6 hr. 30 min.	340 Mbps
		IPB (Light)	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps 1227 MB/min.
	29.97 fps 25.00 fps 24.00 fps 23.98 fps	ALL-I	18 min.	1 hr. 12 min.	4 hr. 42 min.	470 Mbps 3373 MB/min.
		IPB	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps
		IPB (Light)	1 hr. 38 min.	6 hr. 34 min.	25 hr. 40 min.	85 Mbps 619 MB/min.
	119.88 fps 100.00 fps	ALL-I	4 min.	18 min.	1 hr. 10 min.	1880 Mbps 13447 MB/min.
4K UHD	59.4 fps 50.00 fps	ALL-I	8 min.	34 min.	2 hr. 13 min.	1000 Mbps
		IPB	24 min.	1 hr. 39 min.	6 hr. 30 min.	340 Mbps 2443 MB/min.
		IPB (Light)	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps 1227 MB/min.
	29.97 fps 25.00 fps 23.98 fps	ALL-I	18 min.	1 hr. 12 min.	4 hr. 42 min.	470 Mbps 3373 MB/min.
		IPB	49 min.	3 hr. 18 min.	12 hr. 57 min.	170 Mbps 1227 MB/min.
		IPB (Light)	1 hr. 38 min.	6 hr. 34 min.	25 hr. 40 min.	85 Mbps 619 MB/min.
	119.88 fps 100.00 fps	ALL-I	4 min.	18 min.	1 hr. 10 min.	1880 Mbps 13447 MB/min.
Full HD	59.94 fps 50.00 fps	ALL-I	36 min.	2 hr. 27 min.	9 hr. 35 min.	230 Mbps 1656 MB/min.
		IPB	1 hr. 33 min.	6 hr. 12min.	24 hr. 16 min.	90 Mbps 655 MB/min.
		IPB (Light)	2 hr. 45 min.	11 hr. 2 min.	43 hr. 7 min.	50 Mbps 369 MB/min.
	29.97 fps 25.00 fps 23.98 fps	ALL-I	1 hr. 2 min.	4 hr. 9 min.	16 hr. 16 min.	135 Mbps 977 MB/min.
		IPB	3 hr. 3 min.	12 hr. 13 min.	47 hr. 45 min.	45 Mbps 333 MB/min.
		IPB (Light)	5 hr. 1 min.	20 hr. 7 min.	78 hr. 37 min.	28 Mbps 202 MB/min.
	239.76 fps* 200.00 fps*	ALL-I	9 min.	36 min.	2 hr. 21 min.	940 Mbps 6723 MB/min.
	119.88 fps 100.00 fps	ALL-I	18 min.	1 hr. 12 min.	4 hr. 43 min.	470 Mbps 3362 MB/min.

Disclaimers for: Estimated Cumulative Data

- Bit rate indicates video output only, and meta data is not included.
- The same values apply to 4K DCI, 4K UHD, and Full HD whether [Movie cropping] is set to [Enable] or [Disable]
- Movie recording is interrupted if the maximum recording time per movie is reached.
- Sound is not recored for approx. the last two frames when the compression method for movie recording quality is IPB or IPB-Light (audio:AAC) or [C.Fn 4-2 Audio compression] is set to [Enable]. Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.

* Firmware version 1.2.0 or later

Card Performance Requirements

<table>
<tr><th colspan="2" rowspan="2"></th><th colspan="2" rowspan="2">Movie Recording Size</th><th>CFexpress Card</th><th colspan="2">SD Card</th></tr>
<tr><th>8 bit / 10 bit</th><th>8 bit</th><th>10 bit</th></tr>
<tr><td rowspan="6">6K RAW</td><td rowspan="2">59.94 fps
50.00 fps</td><td>RAW</td><td rowspan="3">CFexpress 2.0 Type-B
[400MB/s or higher]</td><td colspan="2" rowspan="6">-</td></tr>
<tr><td>RAW (Light)</td></tr>
<tr><td>29.97 fps
25.00 fps</td><td>RAW</td></tr>
<tr><td>24.00 fps
23.98 fps</td><td>RAW</td></tr>
<tr><td>29.97 fps
25.00 fps</td><td>RAW (Light)</td><td rowspan="2">CFexpress 2.0 Type-B
[200MB/s or higher]</td></tr>
<tr><td>24.00 fps
23.98 fps</td><td>RAW (Light)</td></tr>
<tr><td rowspan="8">4K</td><td rowspan="3">59.94 fps
50.00 fps</td><td>ALL-I</td><td rowspan="6">CFexpress 2.0</td><td colspan="2">-</td></tr>
<tr><td>IPB</td><td>UHS Speed Class 3
or higher</td><td>Video Speed Class V60
or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2" rowspan="2">UHS Speed Class 3
or higher</td></tr>
<tr><td rowspan="3">29.97 fps
25.00 fps
24.00 fps
23.98 fps</td><td>ALL-I</td></tr>
<tr><td>IPB</td><td colspan="2">Video Speed Class V60
or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2">UHS Speed Class 3
or higher</td></tr>
<tr><td>119.88 fps
100.00 fps</td><td>ALL-I</td><td>CFexpress 2.0 Type-B
[400MB/s or higher]</td><td colspan="2">-</td></tr>
<tr><td rowspan="9">Full HD</td><td rowspan="3">59.94 fps
50.00 fps</td><td>ALL-I</td><td rowspan="6">CFexpress 2.0</td><td colspan="2">UHS Speed Class 3
or higher</td></tr>
<tr><td>IPB</td><td>SD Speed Class 10
or higher</td><td>SD Speed Class 3
or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2" rowspan="2">UHS Speed Class 3
or higher</td></tr>
<tr><td rowspan="3">29.97 fps
25.00 fps
23.98 fps</td><td>ALL-I</td></tr>
<tr><td>IPB</td><td colspan="2">SD Speed Class 6
or higher</td></tr>
<tr><td>IPB (Light)</td><td colspan="2">SD Speed Class 4
or higher</td></tr>
<tr><td>239.76 fps
200.00 fps</td><td>ALL-I</td><td>CFexpress 2.0 Type-B
(200MB/s or higher)</td><td colspan="2">Video Speed Class V90
or higher</td></tr>
<tr><td>119.88 fps
100.00 fps</td><td>ALL-I</td><td>CFexpress 2.0</td><td colspan="2">Video Speed Class V60
or higher</td></tr>
</table>

LCD Screen

Type	TFT color, liquid-crystal monitor (Vari-angle design)
Monitor Size	3.2-inch (screen aspect ratio of 3:2) 3.15 in./8.01cm diagonal (2.63 in./6.67cm width, 1.75 in./4.44cm height)
Dots	Approx. 4.15 million dots
Coverage	Approx. 100% vertically/horizontally
Brightness Control	Manually adjustable to one of seven brightness levels
Coating	Clear View LCD II • Anti-smudge coating applied. • Anti-reflection coating not applied.
Interface Languages	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)

Playback

Display Format

Item	Still Photo	Movie
Magnify zoom display	1.5x–10x (15 levels)	-
AF point display	Yes	-
Grid display	Off / 3×3 / 6×4 / 3×3+diag	-
Rating	OFF / 1 to 5 Stars Select images / Select range / All images in folder / All images on card / All found images	
Image Search	Search conditions Rating / Date / Folder / Protect / Type of file (1) / Type of file (2)	
Protect	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	
In-camera RAW image processing	Supported	-
Resizing	Supported	-
Cropping	Supported	-

Highlight Alert	The white areas with no image data will blink.
Histogram	Brightness and RGB

Quick Control Function

Function	The Quick Control screen is accessed by pressing the Quick Control button during still photo shooting.

Image Protection and Erase

Protection	(1) Single image (select image) (2) Select range (3) All images in a folder (4) All images on card • Image browsing and image search can be based on ratings. • Ratings-based image selections also possible with DPP. (5) All found images (only during image search)
Erase	Except protected images (1) Select images to erase (2) Select range (3) All images in folder (4) All images on card (5) All found images (only during image search)

Direct Printing

Compatible Printers	Not supported

DPOF: Digital Print Order Format

DPOF	Compliant to DPOF Version 1.1

Wi-Fi®

Standards Compliance	IEEE 802.11a/ac/b/g/n
Transmission Method	DS-SS modulation (IEEE 802.11b) OFDM modulation (IEEE 802.11g/n/a/ac)
Transition Frequency (Central Frequency)	**2.4 GHz band** Frequency: 2412 to 2462 MHz Channels: 1 to 11 channels **5 GHz band** Frequency: 5180 to 5825 MHz Channels: 36 to 165 channels
Connection Method	(1) Camera access point mode (2) Infrastructure mode
Security	See table below
Communication with a Smartphone	Images can be viewed, controlled, and received using a smartphone. Remote control of the camera using a smartphone is possible depending on the Camera Connect specifications. Images can be sent to a smartphone.
Remote Operation Using EOS Utility	The camera can be controlled via Wi-Fi® using EOS Utility.
Print from Wi-Fi® Printers	Not 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. 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).

Security

Connection Method	Authentication	Encryption	
		Encryption	Key Format and Length
Camera Access Point	WPA2/WPA3-Personal	AES	• ASCII 8 characters
	Open	Disable	
Infrastructure	Open	WEP	• Hexadecimal 10 digits • Hexadecimal 26 digits • ASCII 5 characters • ASCII 13 characters
		Disable	
	Shared key	WEP	Same as WEP above
	WPA/WPA2/WPA3-Personal	TKIP AES	• Hexadecimal 64 digits • ASCII 8–63 characters
	WPA/WPA2/WPA3-Enterprise		

<table>
<tr><td>Cloud RAW Image Processing via image.canon
(firmware 1.2.0 or higher)</td><td>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.

*This feature requires a paid subscription (service begins July 25, 2022).</td></tr>
<tr><td colspan="2">Bluetooth®</td></tr>
<tr><td>Standards Compliance</td><td>Bluetooth Specification Version 5.0 compliant (Bluetooth low energy technology)</td></tr>
<tr><td>Transmission Method</td><td>GFSK modulation</td></tr>
<tr><td colspan="2">Customization</td></tr>
<tr><td>Custom Functions</td><td>34 Custom Functions are settable.</td></tr>
<tr><td>Custom Controls</td><td>Customizable Buttons<table><tr><td>Shutter button (half-press)</td></tr><tr><td>Movie button</td></tr><tr><td>Multi-function button</td></tr><tr><td>Multi-function 2 button</td></tr><tr><td>LCD panel illumination button</td></tr><tr><td>MODE button</td></tr><tr><td>AF-ON button</td></tr><tr><td>Smart controller</td></tr><tr><td>AE Lock button</td></tr><tr><td>AF point button</td></tr><tr><td>DOF preview button</td></tr><tr><td>Lens Function button</td></tr><tr><td>Set button</td></tr><tr><td>Multi-controllers</td></tr></table>Customizable Dials<table><tr><td>Main dial</td></tr><tr><td>Quick control dial 1 & 2</td></tr><tr><td>Multi-controllers</td></tr><tr><td>Touch control</td></tr><tr><td>Smart controller</td></tr><tr><td>Control ring</td></tr></table></td></tr>
<tr><td>My Menu Registration</td><td>• Up to six items from the menu items and the top-tier items of Custom Functions can be registered to each tab.
• Up to five My Menu tabs can be added.<table><tr><td>My Menu tab overall operations</td><td>• Add My Menu tab
• Delete all My Menu tabs
• Delete all items
• Menu display (display method)</td></tr><tr><td>My Menu tab detailed operations</td><td>• Selecting a registered item
• Sorting registered items
• Deleting selected registered items
• Deleting registered items in a batch
• Deleting tabs
• Changing a tab name (16 ASCII characters)</td></tr></table></td></tr>
</table>

Interface

USB Terminal

Equivalent to Hi-Speed USB (USB 3.2 Gen 2)
- Terminal type: USB Type-C
- For computer communication / smartphone communication
- For in-camera charging with USB Power Adapter PD-E1
  *Powering the camera while using PD-E1 is not supported
- For in-camera charging and powering the camera with non-Canon USB PD-compliant devices for which operation has been verified.

Ethernet Terminal

RJ-45 Terminal

Video Out Terminal

HDMI micro OUT terminal Type D (Resolution switches automatically) / CEC not compatible
- Images can be displayed through the HDMI output and on screen at the same time.
- Images will not be displayed unless [NTSC] or [PAL] is properly set according to the video system of the TV set.

Clean HDMI output

Provided

Microphone input terminal

3.5mm diameter stereo mini jack

Headphone terminal

3.5mm diameter stereo mini jack

Power Source

Battery

LP-E19
- LP-E4 cannot be used
- LP-E4N is also compatible, but charging with Battery Charger LC-E19 is not recommended, in consideration of safety standards for AV/ICT products (as described in IEC 62368-1).

USB charging/ power conditions

LP-E19 battery can be charged using USB Power Adapter PD-E1 while camera is turned OFF (LP-E4N is not supported).

Powering the camera while using PD-E1 is not supported.

AC Power Source

AC adapter	AC-E19
DC coupler	DR-E19

Number of shots available

Shooting Method	Temperature	Battery Life (Approx. number of shots)	
		Power Saving	Smooth
Viewfinder	+23°C / 73°F	620	440
Screen		860	760

Battery Check

Automatic battery check when the power switch is turned ON.
Displayed in 6 levels on top LCD panel.
- Battery level can be checked on the LCD panel and in the viewfinder.

Battery Info display in Set-up Menu:
- Type of power source used.
- Remaining capacity (percentage of battery charge remaining).
- Recharge performance: (3-level display of battery's ability to hold a charge)

Start-up Time

Approx. 0.4 sec.
- Based on CIPA testing standards.

Dimensions and Weight

Dimensions (W x H x D)

Approx. 5.91 x 5.61 x 3.43 in. / 150 x 142.6 x 87.2mm
• Based on CIPA standards.

Weight

Body (including battery and CFexpress card) *Based on CIPA standards.	Approx. 2.24 lbs.	Approx. 1015g
Body only	Approx. 1.81 lbs.	Approx. 822g

* Not including body cap, eyecup, or cover for the multi-function shoe.

Operating Environment

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

Video Recording Times

Maximum durations of shooting until recording stops in respective modes by heat. (Max. approx.)[1]

Format	Canon's measurement-condition: Recording begins from "cold start" at the ambient temperature of 23°C[2]	
	Auto power off temperature: Standard	Auto power off temperature: High[3,4]
6K 60p RAW	25 min.	60 min. or more
4K 120p ALL-I	12 min.	
4K 60p (6K oversampling) ALL-I	60 min. or more	
4K 30p (6K oversampling) ALL-I	Not limited by heat	
Full HD 240p ALL-I	14 min.	

1. Confirmed with a 325GB card based on Canon's testing standard
2. The maximum duration of shooting may be shorter under some circumstances even if recording begins from a "cold start", due to a rise in temperature inside the camera caused by pre-shooting camera setting operations or by prolonged use of the Live View mode. When the card is full, movie recording stops automatically. In this case, duration time when you erase the data and restart shooting.
3. When set to "Auto power off temperature: High", the card can get very hot and may even cause burns when being removed from the card slot.
4. Durations of shooting may not change between the [Standard] and [High] settings, depending on types of cards used.