

EOS Ra

GO BEYOND THE STARS

Give your astro photos a clear advantage with the EOS Ra; a compact and lightweight full frame mirrorless camera with a modified IR filter and 30x magnification for checking glorious galactic detail.



- Capture the full beauty of the night sky
- The ultimate astrophotography tool
- Harness the full power of mirrorless
- Compact and lightweight
- Capture stunning nightscapes in glorious 4K

30.3 MEGA
PIXELS
CMOS

ISO
40000


Vari angle LCD


Wi-Fi
Bluetooth®


EOS Movie
4K+FULL HD

USB
Charging

PRODUCT RANGE



EOS R



EOS Ra



EOS RP

Canon EOS R
Canon EOS Ra
Canon EOS RP

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TECHNICAL SPECIFICATIONS

EOS Ra

IMAGE SENSOR

Type	36 x 24 mm CMOS
Effective Pixels	Approx. 30.3 megapixels
Total Pixels	Approx. 31.7 megapixels
Aspect Ratio	3:2
Low-Pass Filter	Built-in/Fixed
Sensor Cleaning	EOS integrated cleaning system
Colour Filter Type	Primary Colour with increased Ha light Transmission rate

IMAGE PROCESSOR

Type	DIGIC 8
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LENS

Lens Mount	RF (EF and EF-S lenses can be attached using EF TO EOS R ADAPTER, EF TO EOS R ADAPTER WITH CONTROL RING, EF TO EOS R Drop in filter ADAPTER EF-M lenses not compatible)
Focal Length	Equivalent to 1.0x the focal length of the lens with RF and EF lenses 1.6x with EF-S

FOCUSING

Type	Phase-difference detection system with image sensor (Dual Pixel CMOS AF)
AF System/Points	With Area 88% horizontal and 100% vertical
AF working range	EV -6 – 18 (at 23°C & ISO100)
AF Modes	One Shot Servo AF
AF Point Selection	Automatic selection: Face/eye + tracking, 143 Available AF areas when automatically selected Manual selection: 1-point AF (AF frame size can be changed) 5655 AF positions available Manual selection: AF point Expansion 4 points (up, down, left, right) Manual selection: AF point Expansion surrounding Manual selection: Zone AF (all AF points divided into 9 focusing zones) Manual selection: Large Zone AF (Vertical) Manual selection: Large Zone AF (Horizontal)
AF Lock	Locked when shutter button is pressed halfway or AF ON is pressed in One Shot AF mode. Using customised button set to AF stop in AI servo
AF Assist Beam	Emitted by built in LED or optional dedicated Speedlite (flash)
Manual Focus	Selected on lens

EXPOSURE CONTROL

Metering modes	Real-time with image sensor, 384-zone metering. (1) Evaluative metering (linked to All AF points) (2) Partial metering (approx. 6.1% of viewfinder at centre) (3) Spot metering: Centre spot metering (approx. 2.7% viewfinder at centre) AF point-linked spot metering not provided (4) Centre weighted average metering
Metering Brightness Range	EV -3 – 20 (at 23°C, ISO100, with evaluative metering)
AE Lock	Auto: AE lock takes effect when focus is achieved Manual: By AE lock button in P, Av, Fv, Tv and M modes
Exposure Compensation	+/-3 EV in 1/3 or 1/2 stop increments (can be combined with AEB).
AEB	+/-3 EV in 1/3 or 1/2 stop increments
Anti-flicker shooting	Yes. Flicker detected at a frequency of 100 Hz or 120 Hz. Maximum continuous shooting speed may decrease
ISO Sensitivity ⁽⁸⁾	Auto 100-40000 (in 1/3-stop or whole stop increments) ISO can be expanded to L:50, H1: 51200, H2: 102400,
SHUTTER	
Type	Electronically-controlled focal-plane shutter
Speed	30-1/8000 sec (1/2 or 1/3 stop increments), Bulb (Total shutter speed range. Available range varies by shooting mode)
Shutter Release	Soft touch electromagnetic release

WHITE BALANCE

Type	Auto white balance with the imaging sensor
Settings	AWB (Ambience priority/White priority), Daylight, Shade, Cloudy, Tungsten light, White Fluorescent light, Flash, Custom, Colour Temperature Setting White balance compensation: 1. Blue/Amber +/-9 2. Magenta/Green +/-9 Yes, 1 setting can be registered +/-3 levels in single level increments
Custom White Balance	3, 2, 5 or 7 bracketed images per shutter release
WB Bracketing	Selectable Blue/Amber bias or Magenta/Green bias

VIEWFINDER

Type	0.5-inch OLED colour EVF
Dot count	3.69 Million dots (1280x960)
Coverage (Vertical/Horizontal)	Approx. 100%
Magnification	Approx. 0.76x ⁽⁴⁾
Eyepoint	Approx. 23mm (from eyepiece lens centre)
Dioptre Correction	-4 to +2 m ⁻¹ (diopetre)
Viewfinder Information	AF point information, Exposure level indicator, Number of remaining multiple exposures, Exposure compensation, HDR shooting, Highlight tone priority, Multiple-exposure shooting, ISO speed, Dual Pixel RAW shooting, Possible shots, Multi Shot Noise Reduction, Number of self-timer shooting, Digital Lens Optimizer, Maximum burst, AF method, Battery level, AF operation, Exposure simulation, Drive mode, AEB, Metering mode, FEB, Anti-flicker shooting, Still photo cropping, Shooting mode, Aspect ratio, Scene icons Auto Lighting Optimizer, AE lock Picture Style, Flash-ready, White balance, Flash off White balance correction, FE lock, Image Quality, High-speed sync, Bluetooth function, Shutter speed, Wi-Fi function, Multi-function lock warning, Histogram, Aperture Electronic level, Lens information
Depth of field preview	Yes, via customised button
Eyepiece shutter	N/A

LCD MONITOR

Type	8.01cm (3.15") Clear View LCD II, approx. 2.1 million dots
Coverage	Approx. 100%
Viewing Angle horizontally/vertically	Approx. 170° vertically and horizontally
Coating	Anti-reflection and Anti-smudge. Reinforced glass incorporated
Brightness Adjustment	Manual: Adjustable to one of seven levels Colour Tone Adjustment: 4 settings
Touch-screen operations	Capacitive method with menu functions, Quick Control settings, playback operations, and magnified display. AF point selection in still and Movies, touch shutter is possible in still photo shooting.
Display Options	(1) Basic Camera settings (2) Advance Camera settings (3) Camera settings plus histogram and dual level display (4) No info (5) Quick Control Screen

FLASH

Modes	E-TTL II Auto Flash, Metered Manual
X-sync	1/200sec
Flash Exposure Compensation	+/- 3EV in 1/3 increments with EX series Speedlite flashes
Flash Exposure Bracketing	Yes, with compatible External Flash
Flash Exposure Lock	Yes
Second Curtain Synchronisation	Yes via Speedlite
HotShoe/PC terminal	Yes/No

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TECHNICAL SPECIFICATIONS

EOS Ra

External Flash Compatibility	E-TTL II with EX series Speedlite, wireless multi-flash support	Image Size	JPEG: 3:2 ratio (L, RAW, C-RAW) 6720x4480, (M1) 4464x2976, (S1) 3360x2240, (S2) 1696x1280 1.6x (crop) (L) 4176x2784, (S2) 2400x1600 4:3 ratio (L) 5952x4480, (M1) 3968x2976, (S1) 2976x2240, (S2) 2112x1600 1.6:9 ratio (L) 6720x3776, (M1) 4464x2512, (S1) 3360x1888, (S2) 2400x1344 1:1 ratio (L) 4480x4480, (M1) 2976x2976, (S1) 2240x2240, (S2) 1600x1600 New folders can be manually created and selected
External Flash Control	via camera menu screen	Folders	New folders can be manually created and selected
SHOOTING Modes	Stills: Scene Intelligent Auto, Flexible priority AE, Program AE, Shutter priority AE, Aperture priority AE, Manual, Bulb and Custom (x3) Movie: Scene Intelligent Auto, Program AE, Shutter priority AE, Aperture priority AE, Manual, Bulb and Custom (x3)	File Numbering	(1) Consecutive numbering (2) Auto reset (3) Manual reset
Picture Styles	Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined (x3)	EOS MOVIE Movie Type	MOV Video: 4K (16:9) 3840 x 2160, Full HD, HD MPEG4 AVC/H.264 variable (average) bit rate, Audio: Linear PCM
Colour Space	sRGB and Adobe RGB	Movie Size	4K (16:9) 3840 x 2160 (29.97, 25, 24, 23.98 fps) intra or inter frame ⁽¹³⁾ Full HD (16:9) 1920 x 1080 (59.94, 50, 29.97, 25, 23.98 fps) intra or inter frame ⁽¹³⁾ Full HD (16:9) 1920 x 1080 HDR (29.97, 25 fps) inter frame ⁽¹³⁾ Full HD (16:9) 1920 x 1080 (29.97, 25) light inter frame HD (16:9) 1280 x 720 (119.9, 100 fps) intra frame
Image Processing	Highlight Tone Priority Auto Lighting Optimizer (4 settings) Long exposure noise reduction High ISO speed noise reduction (4 settings) (still and video) Lens optical correction ⁽³⁾ : - Peripheral illumination correction, Chromatic aberration correction Distortion correction (during/after still photo shooting, during video only) - Diffraction correction, Digital Lens Optimizer (during/after still photo shooting) Resize to M, S1, S2 ⁽¹⁴⁾ Cropping: JPEG images can be cropped (Aspect ratios 3:2, 4:3, 16:9, 1:1) - 45 cropping sizes selectable, from 11% to 95% (diagonal) - Switch between vertical and horizontal cropping orientation - Image straightening - Cropping frame can be moved using touch screen operation RAW image processing ⁽⁷⁾ Multiple exposure HDR	Colour Sampling (Internal recording)	4K - YCbCr4:2:2 (8-bit) Full HD/HD - YCbCr4:2:0 (8-bit)
Drive modes	Single, Continuous High, Continuous Low, Silent Single, Self timer (2s+remote, 10s+remote)	Canon Log	Yes Log 1
Continuous Shooting	Max. Approx. 8fps, speed maintained for 100 JPEG or 47 RAW images ^{(11) (2) (16)} Max. 5fps with AF Tracking	Movie Length	4K and Full HD - Max duration 29min 59sec. (excluding High Frame Rate movies). No 4GB file limit with exFAT CF card.
Interval timer	Via Remote Controller Adapter RA-E3	High Frame Rate Movie	MOV Video: HD - 1280 x 720 at 100fps or 119.9fps Recorded as 1/4-speed slow motion movie Single scene maximum recording up to 7min 29sec.
LIVE VIEW MODE Type	Electronic viewfinder with image sensor	4K Frame Grab	8.3-megapixel JPEG still image frame grab from 4K movie possible
Coverage	Approx. 100% (horizontally and vertically)	Bitrate/Mbps	MOV: 4K (29.97p/25.00p/24.00p/23.98p): ALL-I Approx. 480 Mbps 4K (29.97p/25.00p/24.00p/23.98p): IPB Approx. 120 Mbps Full HD (59.94p/50.00p)/ALL-I: Approx. 180 Mbps Full HD (59.94p/50.00p)/IPB Approx. 60 Mbps Full HD (29.97p/25.00p/24.00p/23.98p)/ALL-I: Approx. 90 Mbps Full HD (29.97p/25.00p/24.00p/23.98p)/IPB: Approx. 30 Mbps HD (119.9p/100.0p)/ALL-I: Approx. 160 Mbps MP4: Full HD (29.97p/25.00p)/IPB (Light): Approx. 12 Mbps
Frame Rate	59.97 fps (smooth) / 29.97 fps (power saving)	Microphone	Built-in stereo microphones (48 Khz, 16-bit x 2 channels)
Focusing	Manual Focus (Magnify the image 5x, 10x or 30x at any point on screen) Autofocus: Dual Pixel CMOS AF (Face Detection and Tracking AF, 1point AF, Expand AF Area Zone AF, and Touch shutter)	HDMI Display	External Monitor only, External Monitor only without information display or Simultaneous on camera and external monitor
Metering	Real-time evaluative metering with image sensor (384-zone) Partial metering (approx. 6.1% of the centre of the screen) Spot metering (approx. 2.7% of the centre of the screen) Centre-weighted average metering Active metering timer can be changed	HDMI Output	4K (UHD) recording only, uncompressed YCbCr 4:2:2, 8-bit or 10-bit, sound output via HDMI is also possible
Display Options	3 levels available Basic shooting information, Advanced shooting information and Advanced shooting information with Histogram	Focusing	Dual Pixel CMOS AF with Face Detection and Tracking AF, Movie Servo AF Manual Focus
FILE TYPE - STILLS Still Image Type	JPEG: 2 compression options RAW: RAW, C-RAW and Dual Pixel RAW (14-bit, Canon original RAW 3rd edition) Complies with Exif 2.31 and Design rule for Camera File system 2.0 Complies with Digital Print Order Format [DPOF] Version 1.1	ISO	4K - Auto: 100-12800, H: 25600, H1: 51200, H2: 102400, Full HD/HD - Auto: 100-25600, H: 32000, H1: 51200, H2: 102400
RAW+JPEG simultaneous recording	Yes, any combination of RAW + JPEG possible, including Dual Pixel RAW + JPEG	OTHER FEATURES Custom Functions Metadata Tag	22 Custom Functions User copyright information (can be set in camera) Image rating (0-5 stars) IPTC data (registered with EOS Utility) Image transfer with caption (Caption registered with EOS Utility)
		LCD Panel/Illumination	Yes/Yes

Canon

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TECHNICAL SPECIFICATIONS

EOS Ra

Water/Dust resistance	Yes	SOFTWARE	
Voice Memo	No	Image Processing	Digital Photo Professional 4.10 or later (RAW Image Processing)
Intelligent Orientation Sensor	Yes	Other	EOS Utility 3.10 or later (incl. Remote Capture), Picture Style Editor, Map Utility, EOS Lens Registration Tool, EOS Web Service Registration Tool, Canon Camera connect app (iOS/Android)
Playback zoom	1.5x - 10x in 15 steps		
Display Formats	(1) Single image (2) Single image with information (2 levels) Basic - Shooting information (shutter speed, aperture, ISO and Image quality) Detailed - Shooting information (shutter speed, aperture, ISO, metering Image, quality and file size), Lens information, Brightness and RGB histogram, White balance, Picture Style, Color space and noise reduction, Lens optical correction, GPS information, IPTC information (3) 4 image index (4) 9 image index (5) 36 image index (6) 100 image index (7) Jump Display (1, 10 or 100 images, Date, Folder, Movies, Stills, Protected images, Rating) (8) Movie edit (9) RAW processing (10) Rating	POWER SOURCE	
Slide Show	Image selection: All images, by Date, by Folder, Movies, Stills, Protected images or Rating Playback time: 1/2/3/5/10 or 20 seconds Repeat: On/Off	Batteries	Rechargeable Li-ion Battery LP-E6N (supplied)/LP-E6
Histogram	Brightness: Yes RGB: Yes	Battery life	Approx. 370 shots (at 23°C) ⁽⁵⁾ Approx. 350 (at 0°C)
Highlight Alert	Yes	Battery Indicator	6 levels + percentage
Image Erase	Single image, select range, Selected images, Folder, Card	Power saving	Power turns off after 30 seconds, 1, 3, 5, 10 or 30mins
Image Erase Protection	Erase protection of Single image, Folder or Card all found images (only during image search) 2 or 10 sec.	Power Supply & Battery Chargers	Battery charger LC-E6E (supplied), AC Adapter AC-E6N and DC Coupler DR-E6, AC Adapter Kit ACK-E6N/ACK-E6, Car Battery Charger CBC-E6, PD-E1 USB power adapter
Self Timer			
Menu Categories	(1) Shooting menu (2) AF Menu (3) Playback menu (4) Setup menu (5) Custom Functions menu (6) My Menu	PHYSICAL SPECIFICATIONS	
Menu Languages	29 Languages English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Vietnamese, Hindi, Romanian, Ukrainian, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean, Malay, Indonesia and Japanese	Body Materials	Magnesium Alloy body and polycarbonate with glass fibre parts
Firmware Update	Update possible by the user (Camera, Lens, WFT, External Speedlite, BLE remote control, Lens adapter)	Operating Environment	0 – 40 °C, 85% or less humidity
INTERFACE		Dimensions (WxHxD)	135.8 x 98.3 x 84.4mm
Computer	SuperSpeed USB 3.1 USB C connector	Weight (body only)	Approx. 580 g (660 g with card and battery)
Wi-Fi	Wireless LAN (IEEE802.11b/g/n) (2.4 GHz only), with Bluetooth support ⁽¹⁾⁽²⁾ Features supported - EOS Utility, Smartphone, Upload to Web, Wireless printing	ACCESSORIES	
Other	HDMI mini out (Type C, HDMI-CEC compatible), External Microphone In/Line In (Stereo mini jack), Headphone socket (Stereo mini jack), E3-type terminal (remote control terminal)	Wireless File Transmitter	Wireless File Transmitter WFT-E7B
DIRECT PRINT		Lenses	All RF lenses (EF & EF-S via Lens adapters)
PictBridge	Yes (Via Wireless LAN only)	Lens adapters	EF TO EOS R ADAPTER, EF TO EOS R ADAPTER WITH CONTROL RING, EF TO EOS R Drop in filter ADAPTER
STORAGE		Flash	Canon Speedlite (EL-100, 90EX, 220EX, 270EX, 270EX II, 320EX, 380EX, 420EX, 430EX, 430EX II, 430EX III 470EX-AI, 550EX, 580EX, 580EX II, 600EX, 600EX-RT, 600EX-II-RT, Macro-Ring-Lite MR-14EX, Macro Ring Lite MR-14EX II, Macro Twin Lite MT-24EX, Macro Twin Lite MT-26EX Speedlite Transmitter ST-E2, Speedlite Transmitter ST-E3-RT)
SUPPORTED OPERATING SYSTEM		Remote Controller/Switch	Remote control with E3 type socket and Speedlite 600EX-II-RT
PC & Macintosh	Windows 8.1 and Windows 10 (tablet mode not supported) OS X v10.11, 10.12, 10.13 and 10.14	Other	BG-E22 battery grip, GP-E2 GPS receiver
		Footnotes	All data is based on Canon standard testing methods except where indicated. Subject to change without notice. (1) Large/Fine resolution (2) Based on Canon's testing conditions, JPEG, ISO 100, Standard Picture Style. Maximum fps and buffer capacity may be reduced depending on the cameras settings, light level, subject, memory card brand and capacity, image recording quality, ISO speed, drive mode, Picture Style, Custom functions etc. (4) with 50mm lens at infinity, -1m ⁻¹ dpt (5) Based on the CIPA Standard and using the battery supplied with the camera, except where indicated (6) Frame grab images from 4K movies and images shot in S2 quality cannot be resized (7) RAW image processing during image Playback only with RAW and Dual Pixel RAW only (8) Recommended Exposure Index (10) Figures quoted are when used with UHS-II SD memory card (11) The AF area available vary depending on the lens used (12) Wi-Fi use may be restricted in certain countries or regions



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Canon Inc.
canon.com
Canon Europe
canon-europe.com
English edition
Canon Europa NV 2019

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EOS Ra

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Sales Start Date: Dec 2019



PRODUCT DETAILS:

Product Name	Mercury Code	EAN Code
D.CAMERA EOS Ra EU26	4180C003AA	4549292158427

OPTIONAL ACCESSORIES:

Accessory Name	Mercury Code	EAN Code
Power Supply		
CAMERA BATTERY PACK LP-E6N	9486B002AB	4549292008302
CAMERA BATTERY CHARGER LC-E6E	3349B001AA	4960999627502
USB Power Adapter PD-E1	3250C003AA	4549292125412
Cables		
Interface Cable IFC-100U	3224C001AA	4549292124200
Interface Cable IFC-400U	3225C001AA	4549292124224
Miscellaneous		
Battery Grip BG-E22	3086C003AA	4549292119930
Camera Cover R-F-5	3201C001AA	4549292123852
Lenses		
LENS RF24-105MM F/4L IS USM EU26	2963C005AA	4549292115611
LENS RF28-70MM F/2L USM EU26	2963C007AA	8714574660066
LENS RF50MM F/1.2L USM EU26	2965C006AA	8714574660080
LENS RF 15-35mm F/2.8L IS USM EU26	3682C005AA	4549292152272
LENS RF24-70MM F/2.8L IS USM EU26	3680CD055AA	4549292148763
LENS RF70-200MM F/2.8L IS USM EU26	3792C005AA	4549292156263
LENS RF85MM F/1.2 L USM EU26	3447C005AA	4549292146691
LENS DUST CAP RF	2962C001AA	4549292115604
Mount Adapter		
MT ADAPTER EF-EOS R	2971C005AA	4549292115703
CONTROL RING MOUNT ADAPTER EF-EOS R	2972C005AA	4549292115710
DIF MT ADAPTER EF-EOS R WITH V-ND FILTER	3443C005AA	4549292141610
DIF MT ADAPTER EF-EOS R WITH C-PL FILTER	3442C005AA	4549292141603

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OPTIONAL ACCESSORIES:

Accessory Name	Mercury Code	EAN Code
Remote accessories		
Wireless Remote-Control BR-E1	2140C001AA	4549292087864
Remote Switch RS-60 E3	2469A002AA	4960999581354



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MEASUREMENT / LOGISTIC INFORMATION:

Product Name	Mercury Code	Pack type	Pack description	Quantity per pack	Length (cm)	Width (cm)	Height (cm)	Gross Weight (kg)	
D.CAMERA EOS Ra EU26	4180C003AA	EA	Each	1	28.2	22.5	15.1	1.497	
	4180C008AA	CT	Carton	6	47.7	47.1	31.4	10.31	
	4180C009AA	EP	Euro Pallet		36	120	80	109.2	69.26
			Layers per Pallet		3				
			Cartons per Layer		2				
			Products per layer		12				

What's in the box?

- Canon EOS EOS RA Body
- Camera Cover R-F-5
- Neck Strap
- Battery Charger LC-E6E
- Battery Pack LP-E6N
- AC Cable
- Interface Cable IFC-100U



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