

Clifton Cameras Product Specification

Canon EOS R3 Camera Full Spec

IMAGE SENSOR	
Туре	36 x 24 mm CMOS
Effective Pixels	Approx. 24.1 megapixels
Total Pixels	Approx. 26.7 megapixels
Aspect Ratio	3:2
Low-Pass Filter	Built-in/Fixed
Sensor Cleaning	EOS integrated cleaning system
ColourFilter Type	Primary Colour
Sensor Shift IS	Yes, up to 8-Stops advantage depending on the lens used 1
IMAGE PROCESSOR	
Туре	DIGIC X
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	
Туре	Dual Pixel CMOS AF II
AF System/Points	With Area 100% horizontal and 100% vertical (Auto selection)2 100% horizontal and 90% vertical (manual selection)2
AF working range	EV -7.5 –20 (at 23°C & ISO100)3
AF Modes	One Shot Servo AF



AF Point Selection	Automatic selection: 1053 Available AF areas when automatically selected Manual selection: 1-point AF (AF frame size can be changed) 4779 AF positions available stills (3969 Movies) Manual selection: AF point Expansion 4 points (up, down, left, right) Manual selection: AF point Expansion surrounding Manual selection: Flexible Zone AF 1-3 (all AF points divided into minimum 9 to 999 maximum focusing zones)
AF Tracking	Humans, Animals (Dogs, Cats and Birds) or Vehicles (Racing cars or Motor bikes),
AF Lock	Locked when shutter button is pressed halfway or AF ON is pressed in One Shot AF mode. Using customisedbutton 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. 5.9% of viewfinder at centre) (3) Spot metering: Centre spot metering (Approx. 2.9% 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 available with both electronic and mechanical shutter High Frequency anti flicker shooting for M and TV modes
ISO Sensitivity	Auto 100-102400 (in 1/3-stop or whole stop increments) ISO can be expanded to L:50, H1:204800, 4



SHUTTER	
Туре	Electronically controlled focal-plane shutter and Electronic shutter function in sensor
Speed	Mechanical: 30-1/8000 sec (1/2 or 1/3 stop increments), Bulb Electronic: 30-1/64000 (1/2 or 1/3 stop increments up to 1/16000 then 1 stop until 1/64000) (Total shutter speed range. Available range varies by shooting mode)
Shutter Release	Soft touch electromagnetic release
WHITE BALANCE	
Туре	Auto white balance with the imaging sensor
Settings	AWB (Ambience priority/White priority), Daylight, Shade, Cloudy, Tungsten light, White Fluorescent light, Flash, Custom, ColourTemperature Setting White balance compensation: 1.Blue/Amber +/-9 2.Magenta/Green +/-9
Custom White Balance	Yes, 5 setting can be registered
WB Bracketing	+/-3 levels in single level increments 3, 2, 5 or 7 bracketed images per shutter release Selectable Blue/Amber bias or Magenta/ Green bias
VIEWFINDER	
Туре	0.5-inch OLED colour EVF
Dot count	5.76 Million dots (1600x1200)
Coverage (Vertical/Horizontal)	Approx. 100%
Magnification	Approx. 0.76x 5
Eyepoint	Approx. 23mm (from eyepiece lens centre)
DioptreCorrection	-4 to +2 m-1 (dioptre)
Display performance	Power saving: 59.94 fps Smooth 119.98 fps



Viewfinder Information	AF point information, Eye Control pointer, Exposure level indicator, Shooting mode, ISO speed, Shutter speed, Aperture, Number of remaining multiple exposures, Exposure compensation, HDR shooting, Highlight tone priority, Multiple-exposure shooting, 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, Aspect ratio, 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, Wi-Fi function, Multi-function lock warning, Histogram, Electronic level, Lens information, focus distance scale, vertical exposure scale, Grid
Depth of field preview	Yes, via customisedbutton
LCD MONITOR	
Туре	8.01 cm (3.2") Clear View LCD II, Approx. 4.15 million dots
Coverage	Approx. 100%
Viewing Angle horizontally/ vertically	Approx. 170° vertically and horizontally
Coating	Anti-smudge.
Brightness Adjustment	Manual: Adjustable to one of seven levels ColourTone 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 (6)Display off



FLASH	
Modes	E-TTL II Auto Flash, Metered Manual
X-sync	1/200sec mechanical shutter / 1/250thelectronic1stcurtain, 1/180sec Electronic shutter
Flash Exposure Compensation	+/-3EV in 1/3 increments with EX series Speedliteflashes
Flash Exposure Bracketing	Yes, with compatible External Flash
Flash Exposure Lock	Yes
Second Curtain Synchronisation	Yes, via Speedlite
Multi-Function shoe/ Hot Shoe/PC terminal	Yes/Yes/Yes
External Flash Compatibility	E-TTL II with EX series Speedlite, wireless multi- flash support
External Flash Control	via camera menu screen
SHOOTING	
Modes	Stills; Flexible priority AE, Program AE, Shutter priority AE, Aperture priority AE, Manual, Bulb and Custom (x3) Movie: Program AE, Shutter priority AE, Aperture priority AE, Manual, and Custom (x3)
Picture Styles	Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined (x3)
ColourSpace	sRGB and Adobe RGB



Image Droposing	Highlight Tong Priority (O sattings)
Image Processing	Highlight Tone Priority (2 settings) Auto Lighting Optimizer (4 settings) Long exposure noise reduction Clarity High ISO speed noise reduction (4 settings) (still and video) Lens optical correction: -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 Cropping: JPEG images can be cropped (Aspect ratios 3:2, 4:3, 16:9, 1:1) Cropping of images -Switch between vertical and horizontal cropping orientation -Image straightening -Cropping frame can be moved using touch screen operation RAW image processing Multiple exposure HDR HEIF to Jpeg conversion
Drive modes	Single, Continuous High+, Continuous High, Continuous Low, Self-timer (2s+remote,
	10s+remote)
Continuous Shooting	Max. Approx. 12 fps. with Mechanical shutter/1stcurtain electronic speed maintained for 1000+ JPEG or 1000 RAW images or 30 FPS with electronic shutter speed maintained for 540 JPEG or 150 RAW images 6
Interval timer	Built in
FILE TYPE -STILLS	
Still Image Type	RAW 14 bit: RAW and C-RAW (Canon original RAW 3rd edition) JPEG 8 bit: 10 compression options HEIF 10 bit: 10 compression options Complies with Exif2.31 and Design rule for Camera File system 2.0 Complies with Digital Print Order Format [DPOF] Version 1.1
RAW+JPEG/HEIF simultaneous recording	Yes, any combination of RAW + JPEG or RAW + HEIF possible,



Image Size	RAW/ C-RAW: 3:2 ratio 6000x4000, 1.6x (crop) 3744x2496 JPEG/ HEIF: 3:2 ratio (L,) 6000x4000, (M) 3984x2656, (S1) 2976x1984, (S2) 2400x1600 1.6x (crop) (L) 3744x2496, (S2) 2400x1600 4:3 ratio (L) 5328x4000, (M) 3552x2664, (S1) 2656x1992, (S2) 2112x1600 16:9 ratio (L) 6000x3368, (M) 3984x2240, (S1) 2976x1680, (S2) 2400x1344 1:1 ratio (L) 4000x4000, (M) 2656x2656, (S1) 1984x1984, (S2) 1600x1600
Folders	New folders can be manually created, named and selected
File Numbering	(1)Consecutive numbering(2)Auto-reset(3)Manual reset
File naming	2 User Presets
EOS MOVIE	
Movie Type	MP4 Video: 4K DCI/ UHD (17:9 / 16:9), Full HD (16:9) 4K/ Full HD: AVC/H.265 variable (average) bit rate, Audio: Linear PCM 4K/ Full HD: MPEG4 AVC/H.264 variable (average) bit rate, Audio: Linear PCM 6K RAW: 12-bit CRM Audio: Linear PCM
Movie Size 7	6K DCI (17:9) 6000 x 3164 (59.94, 50, 29.97, 25, 24, 23.98 fps) RAW 4K DCI (17:9) 4096 x 2160 (59.94, 50, 29.97, 25, 24, 23.98 fps) intra or inter frame / light inter frame (4K UHD (16:9) 3840 x 2160 (119.9, 100, 59.94, 50, 29.97, 25, 23.98 fps) intra or inter frame Full HD (16:9) 1920 x 1080 (119.9, 100, 59.94, 50, 29.97, 25, 23.98 fps) intra or inter frame Full HD (16:9) 1920 x 1080 HDR (29.97, 25 fps) inter frame,
ColourSampling (Internal recording)	6K RAW 12bit, 4K/ Full HD -YCbCr4:2:0 8-bit or YCbCr4:2:2 10bit
Canon Log	Yes, Canon Log 3
Movie Length	Max duration 6 hours. (excluding High Frame Rate movies). No 4 GB file limit with exFATformatted card. 8
High Frame Rate Movie	MOV Video: 4K –DCI 4096x2160 / UHD 3840x2160/ Full HD 1920 x1080 at 100 fps or 119.9 fps 9 Recorded as 1/4-speed slow motion movie
Frame Grab 10	8.8-megapixel JPEG still image frame grab from 4K DCI movie possible 8.3-megapixel JPEG still image frame grab from 4K UHD movie possible (HEIF only possible when HDR PQ is set)



Bitrate/Mbps Bitrate/Mbps	CRM: 6K RAW (59.97p/50p): Approx. 2600 Mbps 6K RAW (29.97p/25.00p/): Approx. 2000 Mbps 6K RAW (24.00p/23.98p): Approx. 1600 Mbps 6K C-RAW (59.97p/50p): Approx. 1800 Mbps 6K C-RAW (29.97p/25.00p): Approx. 900 Mbps 6K C-RAW (24.00p/23.98p): Approx. 720 Mbps 6K C-RAW (24.00p/23.98p): Approx. 720 Mbps MOV: MP4 H.264 Canon Log off: 4K DCI/UHD (119.9p / 100p): Approx. 1880 Mbps 4K DCI/UHD (59.94p/50.00p): ALL-I Approx. 940 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Approx. 230 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Light Approx. 120 Mbps 4K DCI/UHD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 470 Mbps 4K DCI/UHD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 120 Mbps 4K DCI/UHD (29.97p/25.00p/24.00p/23.98p): IPB Light Approx. 60 Mbps Full HD (119.9p / 100p): Approx. 360 Mbps Full HD (59.94p/50.00p): IPB Approx. 180 Mbps Full HD (59.94p/50.00p): IPB Approx. 60 Mbps Full HD (59.94p/50.00p): IPB light Approx. 35 Mbps Full HD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 30 Mbps Full HD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 12 Mbps MOY: MP4 H.265 Canon Log on 4K DCI/UHD (59.94p/50.00p): ALL-I Approx. 1000 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Approx. 340 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Approx. 340 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Approx. 340 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Light
	1000 Mbps 4K DCI/UHD (59.94p/50.00p): IPB Approx. 340 Mbps
	ALL-I Approx. 470 Mbps 4K DCI/UHD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 170 Mbps 4K DCI/UHD (29.97p/25.00p/24.00p/23.98p): IPB Light Approx. 85 Mbps Full HD (119.9p / 100p): Approx. 470 Mbps Full HD (59.94p/50.00p): ALL-I Approx. 230
	Mbps Full HD (59.94p/50.00p): IPB Approx. 90 Mbps Full HD (59.94p/50.00p): IPB light Approx. 50 Mbps Full HD (29.97p/25.00p/24.00p/23.98p): ALL-I Approx. 135 Mbps Full HD (29.97p/25.00p/24.00p/23.98p): IPB Approx. 45 Mbps

Approx. 45 Mbps



Dual recording	Yes
Microphone	Built-in mono microphone (48 KHz, 16-bit x 2 channels)
HDMI Display	Output to external monitor only (output of images and shooting information, images are recorded to the card) Camera screen and External Monitor output (Simultaneous recording to camera and external recorder, camera screen shows images with shooting information)
HDMI Output	4K (DCI) 59.94p / 50.00p/29.97p /25.00p/24.00p/23.98p, 4K (UHD) 59.94p / 50.00p/29.97p / 25.00p / 23.98p, Full HD 59.94p / 59.94i, 50.00p / 50.00i 480p 59.94p 576p 50p Uncompressed YCbCr4:2:2, 8-bit or 10-bit, sound output via HDMI is also possible
Focusing	Dual Pixel CMOS AF II with Eye/Face Detection and Tracking AF (people, animals and vehicles), Movie Servo AF Manual Focus
ISO	Auto: 100-25600, H: up to 102400 Manual: 100-25600, H: up to 102400,
OTHER FEATURES	
Metadata Tag	User copyright information (can be set in camera) Image rating (0-5 stars) IPTC data (registered with EOS Utility) IPTC data (via MFT app) Image transfer with caption (Caption registered with EOS Utility)
LCD Panel/Illumination	Yes/Yes
Water/Dust resistance 11	Yes
Voice Memo	Yes
Intelligent Orientation Sensor	Yes
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 (5)36 image index (7)Jump Display (1, 10 or 100 images, start of burst sequence Date, Folder, Movies, Stills, Protected images, Rating) (8)Movie edit (9)RAW processing (10)Rating
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
Histogram	Brightness: Yes RGB: Yes
Highlight Alert	Yes
Image Erase	Single image, select range, Selected images, Folder, Card
Image Erase Protection	Erase protection of Single image, Folder or Card all found images (only during image search)
Self-Timer	2 or 10 sec.
Menu Categories	 (1)Shooting menu (2)AF Menu (3)Playback menu (4)Network (5)Setup menu (6)Custom Functions menu (7)My Menu
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
Firmware Update	Update possible by the user via menu or Camera connect App (Camera, Lens, External Speedlite, BLE remote control, Lens adapter)



INTERFACE	
Computer	SuperSpeed USB 3.2 Gen 2 USB C connector
Wi-Fi	Wireless LAN (IEEE802.11a/b/g/n/AC)(5 GHz / 2.4 GHz)12, with Bluetooth 5.0 support Features supported -EOS Utility, Smartphone, Upload to image.canon, Wireless printing
Other	HDMI mini out (Type D, HDMI-CEC compatible), External Microphone In/Line In (Stereo mini jack), Headphone socket (Stereo mini jack), N3-type terminal (remote control terminal)
DIRECT PRINT	
PictBridge	Not supported
STORAGE	
Туре	1x CFexpresstype B 1x SD/SDHC/SDXC and UHS-II
SUPPORTED OPERATING SYSTEM	
PC & Macintosh	Windows 8.1 and Windows 10 (tablet mode not supported) OS X v10.12, 10.13, 10.14, 10.15. OS 11
SOFTWARE	
Image Processing	Digital Photo Professional 4.15.1 or later Digital Photo Professional Express mobile app (iOS only)
Other	EOS Utility 3 (incl. Remote Capture), Picture Style Editor, WFT Utility, EOS Lens Registration Tool, EOS Web Service Registration Tool, Canon Camera connect app (iOS/Android), Mobile File Transfer app (iOS/Android),
POWER SOURCE	The state of the s
Batteries	Rechargeable Li-ion Battery LP-E19 (supplied)
Battery life	With LCD Approx.860 shots (at 23°C) With Viewfinder Approx. 620 shots (at 23°C) 13
Battery Indicator	6 levels + percentage
Power saving	Power turns off after 15 seconds, 30 seconds, 1, 3, 5, 10 or 30 mins
Power Supply & Battery Chargers	Battery charger LC-E19E (supplied), AC Adapter AC-E19 and DC Coupler DR-E19, PD-E1 USB power adapter
PHYSICAL SPECIFICATIONS	
Body Materials	Magnesium Alloy body and polycarbonate with glass fibre
Operating Environment	0 –40 °C, 85% or less humidity
Dimensions (WxHxD)	150x 142.6 x 87.2mm
Weight (body only)	Approx. 822 g (1015g with card and battery)



ACCESSORIES	
Wireless File Transmitter	None
Lenses	All RF lenses (EF & EF-S via Lens adapters)
Lens adapters	EF TO EOS R ADAPTER, EF TO EOS R ADAPTER WITH CONTROL RING, EF TO EOS R Drop in filter ADAPTER
Flash	Canon Speedlite (EL-114, EL-100, 90EX, 220EX, 270EX, 270EX II, 320EX, 380EX, 420EX, 430EX, 430EX III, 470EX-AI, 550EX, 580EX14, 580EX III14, 600EX14, 600EX-RT14, 600EX-II-RT14, 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-RT14, Speedlite Transmitter ST-E3-RT V214, Speedlite Transmitter ST-E10)
Remote Controller/Switch	Remote control with N3 type socket, Speedlite600EX-II-RT. SpeedliteEL-1 and BR-E1 Bluetooth remote
Other	Eyecup ER-h, Eyecup ER-hE, Multi-Function Shoe Adapter AD-E1, Multi-Function Shoe Directional Stereo Microphone DM-E1D (Mic), Multi-Function Shoe Adapter for Smartphone Link AD-P1 for Android (phone holder), Stereo Microphone DM-E1 / DM- E100

All Alldata is based on Canon standard testing methods except where indicated. Subject to change without notice.	
Footnotes:-	
1	8 stops based on the CIPA standard with RF 24-105mm F4 L IS USM at a focal length of 105mm
2	The AF area available vary depending on the lens used
3	The lowest light AF is available with an f/1.2 lens, centreAF point, One-Shot AF, at 23°C / 73°F, ISO 100 Except RF lenses with a Defocus Smoothing (DS) coating
4	Recommended Exposure Index
5	with 50mm lens at infinity, -1m-1dpt



6	Under Canon testing standards with CFexpresscard and during servo AF, only RF lenses and some EF lenses can be used for continuous shooting at the maximum speed. For details on supported lenses, refer to Canon's official website. The continuous shooting speed may be reduced by the lens, shutter speed, aperture, flash, flicker reduction processing, subject conditions, and brightness (for example, when shooting in a dark place).
7	4K UHD is 94% horizontal coverage of the image area, Full HD is 100%, 4K movie cropping mode is 62% of the horizonal area
8	If the cameras internal temperature becomes too high the maximum recording time will be reduced
9	In High frame Rate Movie mode sound is not recorded
10	Frame grab is not available for RAW movies or Canon Log 3 movies.
11	Although the camera features dust-and water-resistant construction, this cannot completely prevent dust or water droplets from entering the camera.
12	Wi-Fi use may be restricted in certain countries or regions
13	Based on the CIPA Standard and using the battery supplied with the camera, except where indicated. In power saving mode
14	Must use Multi-Function Shoe Adapter AD-E1 to retain weather sealing