# Clifton Cameras Product Specification

## Canon EOS R Mirrorless System

### Key Features

30.3 Megapixels Dual Pixel CMOS AF sensor

100-40000 ISO

Silent Shutter

-6 EV low light af

8fps continuous shooting

4K and 10-bit movies

Wi-Fi and Bluetooth connectivity

USB 3.1port

Approx. weight of 590g

Dimensions (WxHxD)

135.8 x 98.3 x 84.4mm

## Specifications in detail

### 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

### Image Processor

#### Type

DIGIC 8

### Lens

#### Lens Mount

RF (EF and EF-S lenses can be attached using Mount Adapter EF-EOS R, Control Ring Mount Adapter EF-EOS R, Drop-In Filter Mount Adapter EF-EOS R. 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 + tracking   
Manual selection: 1-point AF (AF frame size can be changed)   
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

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 and silent CMOS sensor readout

#### 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

#### Custom White Balance

Yes, 1 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

#### Type

0.5-inch OLED colour EVF

#### Dot count

3.69 Million dots (1280x960)

#### Coverage (Vertical/Horizontal)

Approx. 100%

#### Magnification

Approx. 0.76x [1](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-1)

#### Eyepoint

Approx. 23mm (from eyepiece lens centre)

#### Dioptre Correction

-4 to +2 m-1 (dioptre)

#### 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

#### Eyepiece shutter

N/A

### LCD Monitor

#### Type

8.01cm (3.15") Clear View LCD II, approx. 2.1million dots

#### Coverage

Approx. 100%

#### Viewing Angle (horizontally/vertically)

Approx. 170° vertically and horizontally

#### Coating

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/Yes via Battery Grip BG-E22

#### External Flash Compatibility

E-TTL II with EX series Speedlite, wireless multi-flash support

#### External Flash Control

via camera menu screen

### 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)

#### Picture Styles

Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined (x3)

#### Colour Space

sRGB and Adobe RGB

#### 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:   
- 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[2](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-2)  
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[3](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-3)  
Multiple exposure   
HDR

#### Drive modes

Single, Continuous High, Continuous Low, Silent Single, Self timer (2s+remote, 10s+remote)

#### Continuous Shooting

Max. Approx. 8fps. speed maintained for 100 JPEG, 47 RAW, 78 C-RAW images[4](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-4)[5](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-5)[6](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-6)  
Max. 5fps with AF Tracking

#### Interval timer

4k time lapse movie

### Live View Mode

#### Type

Electronic viewfinder with image sensor

#### Coverage

Approx. 100% (horizontally and vertically)

#### Frame Rate

59.97 fps (smooth) / 29.97 fps (power saving)

#### Focusing

Manual Focus (Magnify the image 5x or 10x 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

#### 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

#### Display Options

3 levels available Basic shooting information, Advanced shooting information and Advanced shooting information with Histogram

### 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

#### RAW+JPEG simultaneous recording

Yes, any combination of RAW + JPEG possible, including Dual Pixel RAW +JPEG

#### 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   
16:9 ratio (L) 6720x3776, (M1) 4464x2512, (S1) 3360x1888, (S2) 2400x1344   
1:1 ratio (L) 4480x4480, (M1) 2976x2976, (S1) 2240x2240, (S2) 1600x1600

#### Folders

New folders can be manually created and selected

#### File Numbering

(1) Consecutive numbering   
(2) Auto reset   
(3) Manual reset

### EOS Movie

#### Movie Type

MP4 Video: 4K (16:9) 3840 x 2160, Full HD, HD   
MPEG4 AVC/H.264 variable (average) bit rate, Audio: Linear PCM

#### Movie Size

4K (16:9) 3840 x 2160 (29.97, 25, 24, 23.98 fps) intra or inter frame[7](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-7)  
Full HD (16:9) 1920 x 1080 (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   
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

#### Colour Sampling (Internal recording)

4K - YCbCr4:2:0 (8-bit)   
Full HD/HD - YCbCr4:2:0 (8-bit)

#### Canon Log

Yes Log 1

#### Movie Length

4K and Full HD - Max duration 29min 59sec. (excluding High Frame Rate movies). No 4GB file limit with exFAT CF card

#### 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.

#### 4K Frame Grab

8.3-megapixel JPEG still image frame grab from 4K movie possible

#### Bitrate / Mbps

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   
Full HD (29.97p/25.00p): IPB (Light) Approx. 12 Mbps   
HD (119.9p/100.0p): ALL-I Approx. 160 Mbps   
HD (59.94p/50.00p): ALL-I Approx 80 Mbps   
HD (59.94p/50.00p): IPB Approx 26 Mbps   
HD (29.97p/25.00p): IPB Approx 13 Mbps

#### Microphone

Built-in stereo microphones (48 Khz, 16-bit x 2 channels)

#### HDMI Display

External Monitor only, External Monitor only without information display or Simultaneous on camera and external monitor

#### HDMI Output

4K (UHD) recording only, uncompressed YCbCr 4:2:2, 8-bit or 10-bit, sound output via HDMI is also possible

#### Focusing

Dual Pixel CMOS AF with Face Detection and Tracking AF, Movie Servo AF Manual Focus

#### ISO

4K - Auto: 100-12800, H: 25600, H: 32000, H1: 51200, H2: 102400,   
Full HD/HD - Auto: 100-25600, H: 32000, H1: 51200, H2:102400

### Other Features

#### Custom Functions

22 Custom Functions

#### Metadata Tag

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

#### Water/ Dust resistance

Yes

#### Voice Memo

No

#### 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   
(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

#### 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) Setup menu   
(5) Custom Functions menu   
(6) 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 (Camera, Lens, WFT, External Speedlite, BLE remote control, Lens adapter)

### Interface

#### Computer

SuperSpeed USB 3.1 USB C connector

#### Wi-Fi

Wireless LAN (IEEE802.11b/g/n) (2.4 GHz only), with Bluetooth support[8](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-8) Features supported - EOS Utility, Smartphone, Upload to Web, Wireless printing

#### 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)

### Direct Print

#### PictBridge

Yes (Via Wireless LAN only)

### Storage

#### Type

1x SD/SDHC/SDXC and UHS-II

### Supported Operating System

#### PC & Macintosh

Windows 7 (excl. Starter Edition) Windows 8.1 and Windows 10 (tablet mode not supported)   
OS X v10.11-10.14

### Software

#### Image Processing

Digital Photo Professional 4.9 or later (RAW Image Processing)

#### Other

EOS Utility 3.9 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)

### Power Source

#### Batteries

Rechargeable Li-ion Battery LP-E6N (supplied)/LP-E6

#### Battery life

Approx. 370 shots (at 23°C)[9](https://www.canon.co.uk/cameras/eos-r/specifications/#footnote-9)  
Approx. 350 (at 0°C)

#### Battery Indicator

6 levels + percentage

#### Power saving

Power turns off after 30 seconds, 1, 3, 5, 10 or 30mins

#### 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, EC809 USB power adapter

### Accessories

#### Wireless File Transmitter

Wireless File Transmitter WFT-E7B

#### Lenses

All RF lenses (EF & EF-S via Lens adapters)

#### Lens adapters

Mount Adapter EF-EOS R, Control Ring Mount Adapter EF-EOS R, Drop-In Filter Mount Adapter EF-EOS R

#### 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)

#### Remote Controller/ Switch

Remote control with E3 type socket and Speedlite 600EX-II-RT

#### Other

Battery Grip BG-E22, GP-E2 GPS receiver

### Dimensions, Weight & Body Materials

#### Body Materials

Magnesium Alloy body and polycarbonate with glass fibre parts

#### Operating Environment

0 – 40 °C, 85% or less humidity

#### Dimensions (W x H x D)

135.8 x 98.3 x 84.4mm

#### Weight (body only)

Approx. 580 g (660 g with card and battery)

All data is based on Canon standard testing methods except where indicated.

Subject to change without notice.

1. with 50mm lens at infinity, -1m-1 dpt
2. Frame grab images from 4K movies and images shot in S2 quality cannot be resized
3. RAW image processing during image Playback only with RAW and Dual Pixel RAW only
4. Large/Fine resolution
5. 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.
6. Figures quoted are when used with USH-II SD memory card
7. Minimum card write speed required for 4K 30p recording: ALL-I:- UHS-II, Video Speed Class 60 or higher 4K 30p recording IPB:- UHS-I, UHS Speed Class 3 or higher
8. Wi-Fi use may be restricted in certain countries or regions
9. Based on the CIPA Standard and using the battery supplied with the camera, except where indicated