

Clifton Cameras Product Specification

Canon Powershot V10 Full Spec

Image Sensor

- Type

High-sensitivity CMOS sensor (back-illuminated)

- Effective Sensor Size

1.0 inch

- Effective Pixels

Approx. 13.1 megapixels (During Full HD 16:9 Movie recording)

Approx. 15.2 megapixels (During Still photo shooting)

- Total Pixels

Approx. 20.9 megapixels

- Colour Filter Type

RGB primary colour filters

Image Processor

- Type

DIGIC X

Lens

- Focal Length

6.6 mm (Approx. 19 mm equivalent, 35mm format equivalent; During Full HD, 16:9 Movie recording)

6.6 mm (Approx. 18 mm equivalent, 35mm format equivalent; During Still photo shooting)

- Zoom

Digital Zoom (Off / 1.5x / 2.0x / 3.0x)¹

- Maximum Aperture

f/2.8

- Angle of View (Horzntl, Vertl, Diagnl)



97.5° (During Full HD, 16:9 Movie recording)

100.2° (During Still photo shooting)

- Construction

8 elements in 7 groups (including 3 Aspherical lenses and ND filter equivalent to 3 stops)

- Image Stabilisation

Digital only (Off/On/Enhanced)

Focusing

- Type

Contrast detection

- AF Operation (Stills)

One-Shot AF

- AF Operation (Movie)

Movie Servo AF

- AF System / Points

Approx. 100% vertical and horizontal coverage

- AF Modes

Face tracking AF, Specified frame AF²

- AF Point Selection

Subjects to track are specified by tapping

- AF Lock

Tap to start/stop AF³

- Closest Focusing Distance

0.05 m

Exposure Control

- Metering Modes

Evaluative metering with 384-zone (24×16) metering using the image sensor

- Exposure Compensation

Manual exposure movie mode
±3 stops (in 1/3-stop increments)

- ISO Sensitivity
- Auto ISO range for Movies:
 - Full HD ISO 125–6400 (in 1/3-stop increments)
 - 4K ISO 125–3200 (in 1/3-stop increments)Manual ISO range for manual exposure Movies:
 - Full HD ISO 125–6400 (in 1/3-stop increments)
 - 4K ISO 125–3200 (in 1/3-stop increments)Auto ISO range for still photos: ISO 125–12800 (in 1/3-stop increments)

Shutter

- Speed

Movies: 1/4000 to 1/8 sec. (in 1/3-stop increments)
* Varies depending on the movie recording mode or frame rate.
Still photos: 1/2000 to 1.0 sec. (in 1/3-stop increments)
* Varies depending on the scene.

White Balance

- Type

Auto white balance with the imaging sensor

- Settings

AWB (Ambience priority/White priority), Daylight, Shade, Cloudy(Effective also in twilight and sunset), Tungsten light, White Fluorescent light, Colour Temperature White balance shift (Adjustable in [Colour tone] in compatible modes.):
1. Blue/Amber +/-9
2. Magenta/Green +/-9

LCD Monitor

- Type

Approx. 460,000 dots 2.0 inch (aspect ratio of 3:2) TFT colour, liquid-crystal monitor

- Coverage

Approx. 100% vertically and horizontally

- Brightness Adjustment

Manually adjustable in a range of 1–5

- Touch Screen Operations



Tap-based subject selection / Touch Shutter (Disable / Enable) / Menu setting touch control / Quick Control touch control

- Display Options

Tilt Approx. 180° upward

Shooting

- Modes

Still photo shooting: Auto photo (equivalent to Scene Intelligent Auto/A+) Movie recording:

- Auto movie
- Smooth skin movie [4](#) [5](#)
- Movie IS mode
- Manual exposure movie

- Picture Styles

14 colour filters:

For outdoors on a fine day, such as a cafe scene with shade and shadows:

- StoryTeal&Orange: Shifts colours toward teal/orange overall and creates cinematic shadows.
- StoryMagenta: Shifts colours toward magenta overall and creates cinematic shadows.
- StoryBlue: Shifts colours toward blue overall and creates cinematic shadows.
- PaleTeal&Orange: Teal/orange overall, tinged with bluish-white.

For Urban scenes and landscape with sky:

- RetroGreen: Applies a nostalgic effect, from a greenish tint.
- Sepiatone: Applies an effect that is sepia-toned overall.
- AccentRed: Applies an effect that mutes all colours except reds.

For warm food and sweets:

- TastyWarm: Applies an effect with an amber tint and increased saturation, for appetizing food photography of dishes that are golden brown or served warm.
- TastyCool: Applies an effect with a whitish tint and increased saturation, for appetizing food photography of sweets or other vibrant dishes.

For indoors with indirect lighting and night walking scenes:

- BrightAmber: Shifts scenes toward amber overall while brightening dark, indirectly lit or candlelit scenes.
- BrightWhite: Shifts scenes toward white overall while brightening dark, indirectly lit or candlelit scenes.

Bright night cityscape and indoor spaces with sunbeams:

- ClearLightBlue: Shifts scenes toward blue overall, while lowering contrast and brightening shadows to create a sense of clarity.
- ClearPurple: Shifts scenes toward purple overall, while lowering contrast and brightening shadows to create a sense of clarity.
- ClearAmber: Shifts scenes toward amber overall, while lowering contrast and brightening shadows to create a sense of clarity.

- Drive Modes

Single shooting / Self-timer: 10 sec. / Self-timer: 2 sec.

File Types

- Still Image Type



JPEG: 8-bit (Compliant with Design rule for Camera File system 2.0 and Exif 2.31)

- Movie Type

MP4: 8-bit (H.264 / MPEG-4 AVC IPB Standard / IPB Light including AAC compressed audio)

Recording Pixels / Compression

- Image Size

3:2 - (L) 5472 x 3648, (M) 3648 x 2432, (S1) 2736 x 1824, (S2) 2400 x 1600

4:3 - (L) 4864 x 3648, (M) 3248 x 2432, (S1) 2432 x 1824, (S2) 2112 x 1600

16:9 - (L) 5472 x 3072, (M) 3648 x 2048, (S1) 2736 x 1536, (S2) 2400 x 1344

1:1 - (L) 3648 x 3648, (M) 2432 x 2432, (S1) 1824 x 1824, (S2) 1600 x 1600⁶

- Movie Size

4K UHD (16:9) 3840 x 2160 (29.97, 25, 23.98fps) inter frame (IPB) / (IPB Light)

Full HD (16:9) 1920 x 1080 (59.94, 50, 29.97, 25fps) inter frame (IPB) / (IPB Light) | (25, 23.98fps) inter frame (IPB)

- Movie Length

Max movie continuous recording time available 1 hour⁷.

Smooth Skin Movie mode (4K): max 5 min.

No 4GB file limit with exFAT formatted SD card.

- Bitrate / Mbps

4K (29.97p/25.00p/23.98p): IPB Approx. 120 Mbps⁸

4K (29.97p/25.00p/23.98p): IPB (Light) Approx. 60 Mbps⁹

Full HD (59.94p/50.00p): IPB Approx. 60 Mbps¹⁰

Full HD (59.94p/50.00p): IPB (Light) Approx. 35 Mbps

Full HD (29.97p/25.00p): IPB Approx. 30 Mbps

Full HD (29.97p/25.00p): IPB (Light) Approx. 12 Mbps

Full HD (23.98p): IPB Approx. 30 Mbps

- Microphone

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

3.5mm external microphone input (Input impedance 2.2 kΩ, Standard input level -63 dBV, Maximum input level -23 dBV)

- Speaker

Built-in monaural speaker (Movie playback volume: 0 (silent) to 10)

- HDMI Display

Output to external monitor only (output of images/video and shooting information, images/video are recorded to the card)

- HDMI Output



Camera screen and External Monitor output (no recording to the card, camera screen shows images/video with shooting information):

Auto / 1080p

Uncompressed YCbCr 4:2:0, 8-bit, supporting BT.709, when connected to compatible monitors. Simultaneous display on the screen and over HDMI is not supported when [Smooth skin movie] is selected.

- Focusing

Continuous Contrast detection Autofocus

AF operation: Movie Servo AF

AF method: Face tracking AF / Specified frame AF

AF lock: Tap to start/stop AF

Manual focus (MF): Not supported

- ISO

Auto ISO range for Movies:

- Full HD ISO 125–6400 (in 1/3-stop increments)

- 4K ISO 125–3200 (in 1/3-stop increments)

Manual ISO range for manual exposure Movies:

- Full HD ISO 125–6400 (in 1/3-stop increments)

- 4K ISO 125–3200 (in 1/3-stop increments)

Auto ISO range for still photos: ISO 125–12800 (in 1/3-stop increments)

Other Features

- GPS

GPS via Mobile (linked to a compatible smartphone)

- Intelligent Orientation Sensor

Yes

- Histogram

Yes (Brightness in playback mode)

- Self Timer

Approx. 2, 10 s

- Menu Languages

English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Ukraine, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Vietnamese, Hindi, Romanian, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean, Malay, Indonesian, Persian, Hebrew, and Japanese

Connectivity

- Wired Connectivity



HighSpeed USB (USB 2.0 equivalent) USB Type-C connector also used for computer communication / USB charge or power.

- Wireless Connectivity

Wireless LAN (IEEE802.11b/g/n) (2.4 GHz)³², with Bluetooth 4.2 support Features supported - Smartphone, Upload to image.canon, Live Streaming¹¹

- Apps

Canon Camera Connect app (iOS/Android)

- Other

HDMI Micro out (Type D, HDMI-CEC not supported)

External Microphone In (3.5mm Stereo mini jack)

USB Type-C connector with UVC/UAC compatibility¹²

Direct Print

- PictBridge

Not supported

- Canon Printers

Not supported

Storage

- Type

SD/SDHC/SDXC and UHS-I¹³

Software

- Other

Canon Camera Connect app (iOS/Android)

image.canon app (iOS/Android)

Power Source

- Batteries

Built-in rechargeable lithium-ion battery

- Battery Life

Number of possible shots: Approx. 290¹⁴

4K Movie shooting time: Approx. 55 min.



Full HD Movie shooting time: Approx. 1 hr. 20 min.

4K Playback time: Approx. 2 hr. 40 min.

- Battery Indicator

4 level indicator

- Power Saving

Screen off: 30 sec. / 1 min. / 3 min. / 5 min. / Disable¹⁵

Auto power off: 30 sec. / 1 min. / 3 min. / 5 min. / 10 min. / Disable

- Power Supply & Battery Chargers

PD-E1 USB power adapter (The camera also support both Type-C PD compatible and non-PD compatible chargers.¹⁶)

Battery Life

- Viewing Time

4K Playback time: Approx. 2 hr. 40 min.

- Number of Possible Shots

Approx. 290

- Movie Shooting Time

4K Movie shooting time: Approx. 55 min.

Full HD Movie shooting time: Approx. 1 hr. 20 min.

Accessories

- Soft Case / Waterproof Case

Soft case

- Power Supply & Battery Chargers (Optional)

PD-E1 USB power adapter

- Remote Controller / Switch

Wireless Remote Control BR-E1, Smartphone(Using Canon Camera Connect app)

- Other

Stereo Microphone DM-E1 / DM-E100, Tripod grip HG-100TBR, Interface Cable IFC-100U, Interface Cable IFC-400U, Wrist Strap WS-800

Physical Specifications



- Operating Environment

0 – 40 °C

- Humidity Range

10%–90%

- Water/Dust-Resistance

No

- Tripod Mount

1/4 (ISO 1222)

- Dimensions (W x H x D)

Approx. 63.4 × 90.0 × 34.3 mm

- Weight

211 g

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1. Cannot be combined with image stabilization or auto level.
2. Specified frame AF is only available in Movie Recording mode.
3. Only available in Movie recording mode. AF lock icon is displayed only in the detailed information screen.
4. Stronger Smooth Skin effect will reduce the resolution of eyelashes, hair and other areas adjacent to the skin.
5. In humid conditions, condensation may form inside the camera lens when shooting with the Smooth Skin Mode at 4K.
6. Because distortion correction is applied, the camera's effective pixel count may be lower than the image pixel count.



7. If the camera's internal temperature becomes too high the recording time may reduce. Shooting 4K UHD 29.97p for Approx. 20 minutes without heat limit is possible if starting from +23°C. In other modes (apart from Smooth skin Movie recording in 4K that is limited to 5min.) there is no limit due to heat.
8. Bit rate only applies to video output, not audio or metadata.
9. Movie recording stops when the maximum recording time per movie is reached.
10. No audio is recorded for approx. the last two frames with the compression method for movie recording quality set to IPB (Standard) or IPB (Light). Moreover, the video and sound may be slightly out of sync when movies are played back in Windows.
11. Please be aware that live streaming platform may change, stop, or terminate their service, at any time without notice. Please check with live streaming platforms for the latest requirements. Canon makes no representations or warranties with respect to any third party product or service, including live streaming. Requires strong Wi-Fi or Mobile data connection. Live Streaming Such using mobile data may involve third-party fees. Stream quality depends on your upload speed, mobile data service, availability, coverage.
12. USB Type-A power is not guaranteed. PD compliant USB port is required for powering the camera whilst using as a webcam.
13. A microSDXC card with V30 speed class or better is required for best video shooting experience.
14. With a fully charged new battery at +23°C.
15. Power saving functions disabled while connected via USB.
16. USB Type-A charging is not guaranteed.