



Clifton Cameras Product Specification

Canon XA50 UHD 4K Professional Camcorder Full Spec

Specifications in detail

Image Sensor

Sensor

1.0-type CMOS

Filter

RGB Primary Colour Filter

Total Pixels

Approx. 13.4 MP

Effective pixels per sensor

Approx. 8.29 MP (3840 x2160)

Subject illumination range

Approx. 0.1 lx to 100,000 lx

Minimum illumination (PAL)

P Mode: Approx. 1.4 lx (shutter speed 1/25 sec., 50.00P; with auto slow shutter On)

Low Light Mode: Approx. 0.1 lx (shutter speed 1/2 sec.)

Lens

Zoom ratio

15x optical

Focal length (35mm equivalent)

Approx. 25.5 to 382.5 mm Standard IS/IS Off

Minimum focus distance

10 mm at wide end, 60 cm across entire zooming range



Aperture

f/2.8 - f/11 (AV Priority and Manual Modes)

Aperture blades

9 blades

Filter diameter

58mm

Image stabilization system

Optical system (lens shift) + electronic stabilization
Dynamic, Standard, Powered, Off

ND filter

3 densities: turret switched, motor-driven.
ND 1/4, ND 1/16, and ND 1/64.

Zoom control

Zoom rockers on body and handle;
Selectable manual zoom/focus ring on lens;
Wireless controller;
Selectable High Speed mode available.

Zoom Speed

Variable (body rocker only) or Constant speed (body rocker, handle rocker and wireless controller; Fast/Normal/Slow, 16 speed level settings in each)

Focus control

MANUAL: Lens ring and touchscreen point selection (Focus Guide and Peaking assist functions), Focus Preset.
AUTOFOCUS: Touchscreen AF point selection, Face Detection and Tracking, Face Only AF.
(Continuous AF, AF-Boosted MF, AF Speed, AF Response, AF Frame size)

Focus System

Dual Pixel CMOS AF, Contrast AF

Iris control

Touchscreen, Auto

Digital zoom/Teleconverter

300x Digital Zoom, 2x Digital Teleconverter



Image Processor

Type

DIGIC DV 6

Dynamic Range

800% in Wide DR mode

Colour Sampling

YCC 4:2:0

Bit depth

8-bit

Recording

Video storage media

SD/SDHC/SDXC card (2 card slots)

Type

Class U3 cards recommended

Recording time (64GB Card, approx.)

MP4: 150Mbps: 55 mins / 35Mbps: 220 mins

XF-AVC: 160 Mbps: 50 mins / 45 Mbps: 185 mins

Recording file system

FAT32/exFAT

Internal recording format (PAL)

XF-AVC: 3840 x 2160 (160Mbps) / 1920 x 1080 (45 Mbps)

MP4: 3840 x 2160 (150Mbps) / 1920 x 1080 (35/17 Mbps)

External recording output (PAL)

SDI* / HDMI output (Camera mode)

UHD recording mode: 1920 x 1080 25.00P YCC4:2:2 8-bit

Full HD recording mode: 1920 x 1080 50.00P/25.00P; 1280 x 720 50.00P YCC4:2:2 10-bit

* SDI output with XA55 only

External monitoring



SDI* / HDMI (50.00i)

* SDI output with XA55 only

Recording frame rate (PAL)

MP4: 25.00P (UHD), 50.00P/25.00P (Full HD)

XF-AVC: 25.00P (UHD), 50.00P/50.00i/25.00P (Full HD)

Slow/Fast motion (PAL)

3840 x 2160 / 25.00P: x2, x4, x10, x20, x60, x120, x600, x1200

1920 x 1080 / 50.00P: x2, x4, x10, x20, x60, x120, x600, x1200

1920 x 1080 / 25.00P: x0.5

Pre Recording function

Yes. 3 seconds

Still photos

JPEG up to 3840x2160

(Still image resolution is dependent on the video resolution)

Photo storage media

SD Card

Audio

Recording

MP4: MPEG-2 AAC-LC (16-bit 2ch) / LPCM (16-bit 4ch)

XF-AVC: LPCM (24-bit 4ch)

Audio control

Manual or Auto

Independent 2ch Line/Mic/Mic+48V input;

Independent level control per channel (-∞ to +18 dB);

Independent audio limiters (2 ch);

Input mic trimming

Reference Tone

1KHz, -12dB / -18dB / -20dB / Off

Microphone attenuation

On/Off (20dB)

Microphone level meter



Yes

Monitoring Panel

Type

Capacitive LCD touch panel

Size

3.0-inch (7.5 cm, approx. 460,000 dots)

Waveform Monitor

No

Focus Assist

Dual Pixel Focus Guide / Peaking / Magnify

Peaking

Selectable Peaking Colour: Red / Blue / Yellow

Zebra

70% or 100% reference level

Markers

Grid (white/grey) and Level (white/grey)

Viewfinder

Size

0.24-inch, approx. 1.56 million dots

Correction lens

+2.0 to -5 dioptre

Inputs/Outputs

Audio Input

XLR 3-pin jack (x2) with 48V phantom power, Line and Mic options on detachable handle, 3.5mm microphone input jack (Supply Voltage 2.4V DC), Built-in Mic

Headphone output



3.5mm stereo mini jack

HDMI Output

HDMI™ mini connector

USB

Min-B, Hi-Speed USB, PTP class supported

SDI output

XA55: 3G-SDI with BNC connector

XA50: No

Time code

Superimposed on HDMI output signal (Camera Mode only)

Genlock

No

LAN

No

AV terminal

No

DC input

3.4mm jack

Remote Control Terminal

2.5mm mini jack

Exposure

Exposure metering

Centre-weighted average or segment evaluative (determined by shooting mode)

No metering: Fireworks mode, Fixed exposure (1/50 sec.)

Exposure Compensation

Highlight AE, Exposure lock, Auto backlight compensation, Exposure compensation amount shown as ± 3 when locked or ± 2 in AUTO (± 8 increments).



Exposure Lock

Yes.

Auto Gain Control setting

Auto / Manual

Auto Gain Control limit

Wide DR Mode selected: 9 - 38dB (1 dB increments)

Wide DR Mode Off: 0 -38 dB (1 dB increments)

Shutter Speed

Control Modes

Auto, P, Tv, Manual

Shutter speed (PAL)

1/6 - 1/2000 sec

(1/2 - 1/500 sec in Low Light mode)

Slow Shutter (SLS)

50.00P:

Auto slow shutter On: 1/25 to 1/500 sec.

Auto slow shutter Off: 1/50 to 1/500 sec.

25.00P:

Auto slow shutter On: 1/12.5* to 1/500 sec. (*Display is 1/12)

Auto slow shutter Off: 1/25 to 1/500 sec.

Clear Scan

No

White Balance

Auto

Yes

Preset

Daylight (Approx. 5,600K), Tungsten (Approx. 3,200K)

Manual setting

Colour Temperature range: 2,000–15,000K

Default value for Set 1 and Set 2: 5,600K



Shooting Modes

Program AE

AUTO Mode

Manual Mode: P, Tv, Av, M (manual exposure), SCN (Portrait, Sports, Snow, Beach, Sunset, Night, Low Light, Spotlight, Fireworks)

Custom Picture Menu

CP Files:*

C1: Normal / C2:Wide DR / C3: Canon Log3
C4: EOS Std. / C5: USER05 /C6: USER06

Gamma / Colour Space:

BT.709 Wide DR / BT.709
Canon Log 3 / BT.709
EOS Std. / BT.709
BT.709 Normal / BT.709
BT.709 Standard / BT.709

Colour Matrix:

Neutral / Production Camera / EOS Std. / Video

Infrared shooting mode

Yes (green or white)

Built-in IR lamp

Yes, in detachable Handle Unit.
Wavelength: 850nm (near-Infrared)

Look settings

Standard, Neutral, Wide DR, Monochrome
(Adjustment: Sharpness, Contrast, Colour Depth)

Wi-Fi & GPS Specifications

Wi-Fi

No

GPS Information (Optional Accessory)

Location (Latitude/Longitude/Altitude), Coordinated Universal Time (UTC), Satellite reception.
(requires the optional GPS Receiver GP-E2)

Miscellaneous

Tally lamp



Yes, in detachable Handle Unit

Colour Bars (PAL)

Yes. SMPTE or EBU, with 1KHz Tone

Accessory shoe

Yes (cold shoe)

Assignable Buttons

5 assignable buttons*: Assignable to: Digital Tele converter / AF / MF/ AF Frame / Face Only AF / Magnification / Peaking / Push Auto Iris / Zebra 70% / Zebra 100% / Focus Guide / BLC Always On / Powered IS / White Balance / Set WB / WB Priority / IR Light / Pre REC / Slow and Fast Motion / Review Recording / Photo / Monitor Channel / Marker / Menu / Custom Picture / Off

Custom Dial

Av / Tv / M / AGC Limit / Exposure Compensation / Off

Time code

Count up system

Regen / Rec Run / Free Run / Preset (Non-Drop Frame)

Time Code out

Via HDMI out. Superimposed on output, Camera Mode only

Accessories

Supplied

Lens hood with barrier, Mic holder unit, Handle Unit HDU-3, Wireless Controller WL-D89, Lithium battery (CR2025), Compact Power Adapter CA-570, Battery Pack BP-820, AC Cable, Lens Cap

Optional (Includes items not currently on sale)

Canon Battery Pack BP-820/BP-828

Canon AC Adapter CA-570 (included with camera)

Canon Battery Charger CG-800/CG-800E

Canon HDMI cable HTC-100/HTS-100S

Canon Wireless Controller WL-D89

Canon Tele Converter TL-U58

Canon Wide Attachment WA-U58

Canon Soft Carrying Case SC-1000/SC-2000

Canon Wrist Strap WS-20

Canon Shoulder Strap SS-600/SS-650

Canon PROTECT filter 58mm

Canon ND4-L filter 58mm



Canon ND8-L filter 58mm
Canon GPS Receiver GP-E2
Canon Remote Controller RC-V100
Canon Battery Video Light VL-10Li/VL-10LiII
Canon Battery Pack BP-900 series (for VL-10Li/VL-10LiII)
Canon Compact Power Adapter CA910/920/930 (charges BP-900 series battery packs)
Canon Car Battery Adapter CB-910/920 (for charging the BP-900 series)
Canon Interface Cable IFC-300PCU/S / IFC-400PCU

Battery

Battery Pack

Canon Battery Pack BP-820 (supplied), BP-828 (optional)

Power Consumption (recording)

UHD / (150Mbps / 160Mbps) / 25.00P:

XA55: Approx. 5W

XA50: Approx. 4.8W

Continuous Recording Time (approx.)

UHD: (150Mbps / 160Mbps) 25.00p

XA55: 145 mins (BP-820) / 220 Mins (BP-828)

XA50: 150 mins (BP-820) / 230 Mins (BP-828)

FHD: (35Mbps / 45Mbps) 50.00p

XA55: 135 mins (BP-820) / 210 Mins (BP-828)

XA50: 140 mins (BP-820) / 215 Mins (BP-828)

Size and Weight

Dimensions

Approx. 109 x 91 x 214 mm (main body only)

Approx. 140 x 216 x 265 mm

(Including lens hood, BP-820, mic holder unit, and handle unit)

Weight (camera only)

XA55: Approx. 970g

XA50: Approx. 960g

Weight (fully equipped)

XA55: Approx. 1445g

XA50: Approx. 1435g

(Including lens hood, BP-820, mic holder unit, handle unit and one memory card)

Operating Temperature range



Approx. 0 to 40 °C, 85 % (relative humidity)

Approx. -5 to 45 °C, 60 % (relative humidity)

* Firmware update may be required to activate all features

All specifications are subject to change without notice