

Clifton Cameras Product Specification

Canon XA65 4K Pro Camcorder

Specifications

Image Sensor

Sensor:	1/2.3-type CMOS
Filter:	RGB Primary Colour Filter
Total Pixels:	Approx. 21.14MP
Effective Pixels per Sensor:	Approx. 8.29 MP (3840 x 2160)
Subject Illumination Range:	Approx. 0.3 lx to 100,000 lx
Minimum Illumination (PAL):	P (Program AE) Mode: Approx. 4.2 lx (shutter speed 1/25 sec with auto slow shutter On) Low Light Mode: Approx. 0.3 lx (shutter speed 1/2 sec.)

Image Processor

Type:	DIGIC DV 6
Colour Sampling:	YCC 4:2:0 8bit

Lens

Zoom Ratio:	20x Optical
Focal Length (35mm Equivalent):	Approx. 29.3 - 601mm Standard IS/IS Off
Minimum Focus Distance:	1 cm at wide end, 60 cm across entire zooming range
Max. Aperture:	f/1.8 - 2.8 (AV Priority and Manual Modes)
Aperture Blades:	8 blades
Filter Diameter:	58mm
Image Stabilization System:	Optical system (lens shift) + electronic stabilization Dynamic, Standard, Powered IS, Off
ND Filter:	Built-in gradation filter (Auto or Off)
Zoom Control:	Zoom rockers on body and handle; Selectable manual zoom/focus ring on lens; Selectable High Speed and Soft Zoom modes available.



Zoom Speed:	Variable (body rocker only) or Constant speed (body and handle rocker; Fast/Normal/Slow, 16 speed level settings in each)
Focus Control:	MANUAL: Lens ring and touchscreen point selection (Magnify and Peaking assist functions), Focus Preset. AUTOFOCUS: Touchscreen AF point selection, Face Detection and Tracking, Touch and Track, Face Only AF. (Instant AF, Medium AF, Normal AF)
Focus System:	Hybrid AF (High Speed/Medium speed). Uses combination of TTL-video signal detection system and external phase difference metering system. Normal AF. TTL, Contrast based AF
Iris Control:	Touchscreen, Auto
Digital Zoom/Teleconverter:	20x digital zoom (400x with optical zoom) and 40x digital zoom (800x with optical zoom) are available. Digital zoom not available in AUTO mode. 2x Digital Teleconverter

Recording

Video Storage Media:	SD/SDHC/SDXC card (2 card slots)
Recording Time:	150Mbps: 55 mins / 35Mbps: 240 mins / 17Mbps: 495 mins
Recording File System:	FAT32/exFAT
Internal Recording Format (PAL):	XF-AVC: 3840 x 2160 / 25.00P (160 Mbps) 1920 x 1080 / 50.00P, 50.00i, 25.00P (45 Mbps) MP4: 3840 x 2160 / 25.00P(150 Mbps) 1920 x 1080 / 50.00P, 25.00P (35, 17 Mbps)
External Recording Output:	HDMI output (When Shooting): UHD recording mode: 1920 x 1080 / 25.00P, 50.00P (for Slow&Fast), 50.00i (PsF mode); 1280 x 720 / 50.00P YCC 4:2:2 8-bit Full HD recording mode: 1920 x 1080 50.00P/25.00P/50i ; 1280 x720 50.00P YCC4:2:2 10-bit SDI output (When Shooting): UHD recording mode:



1920 x 1080 / 25.00P, 50.00P (for Slow&Fast), 50.00i (PsF mode); 1280 x 720 / 50.00P YCC 4:2:2 8-bit

Full HD recording mode:

1920 x 1080 50.00P/25.00P/50i ; 1280 x720 50.00P YCC4:2:2 10-bit

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-Record Function: Yes. 3 seconds

Still Photos: JPEG up to 3840x2160

(Still image resolution is dependent on the video resolution)

Photo Storage Media: SD Card

System

Display Type: Capacitive LCD touch panel

Size: 3.5-inch (8.8 cm) on the diagonal, Approx. 2,760,000 dots (1280 x RGB x 720)

Wave Form Monitor: No

Focus Assist: Peaking / Magnify

Peaking: Selectable Peaking Colour: Red / Blue / Yellow

Zebra: 70% or 100% reference level

Markers: Grid (white/grey), Level (white/grey), 4:3 (white/grey)

EVF

Size: 0.36-inch (0.92 cm on the diagonal), Approx. 1,770,000 dots (1024 x RGB x 576)

Correction Lens: +2.0 to -5.5 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: HDMITM mini connector



USB:	Type-C Hi-Speed USB (USB 2.0) equivalent. Point-to-point class and UVC supported.
SDI Output:	3G-SDI
Time Code:	Rec Run / Free Run
Genlock:	No
LAN:	No
AV Terminal:	No
DC Input:	USB-C
Remote Control Terminal:	2.5mm mini jack

Miscellaneous

Tally Lamp:	Yes, in detachable Handle Unit
Colour Bars (PAL):	Yes. SMPTE, ARIB or EBU, with 1KHz Tone
Accessory Shoe:	Yes (cold shoe)
Assignable Buttons:	5 assignable Buttons
Custom Dial:	Iris/Shutter/Gain, AGC Limit, Exposure Compensation, Off

Exposure

Exposure Metering:	Center-weighted average metering AUTO, P, Av, Tv, Portrait, Sports, Low Light and IR modes Segment evaluative metering Night Scene, Snow, Beach, Sunset, Spotlight modes No metering in Fireworks mode: Exposure constant
Exposure Compensation:	Highlight AE, Normal, Exposure lock, Auto backlight compensation.
Exposure Lock:	Yes.
Auto ISO / Auto Gain Control Setting:	Auto / Manual
Auto Gain Control Limit:	0 - 23dB (1dB 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 (PAL): No

Streaming, 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)

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
M (Manual) mode
P (program AE), Tv (shutter-priority AE), Av (aperture-priority AE), M (manual exposure), SCN (Portrait, Sports, Night Scene, Snow, Beach, Sunset, Low Light, Spotlight, Fireworks) IR mode

Custom Picture Menu: C1: Normal (BT.709 Normal / BT.709)
C2 to C6: USER02 to USER06

Look Settings: Standard
(Adjustment: Sharpness, Contrast, Colour Depth)

Colour Matrix Settings: Neutral: accurate colour reproduction
Video: Higher contrast colour reproduction

Infrared Shooting Mode: Yes (green or white)

Built-in IR Lamp: Yes, in detachable Handle Unit.



Wavelength: 850nm (near-Infrared)

Audio

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

Audio Control: Manual/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

Accessories

Supplied: Lens hood with barrier, Mic holder unit, Handle Unit HDU-1, Battery Pack BP-820, USB Power Adapter PD-E1, AC Cable

Optionals: Canon Battery Pack BP-820/BP-828, Canon Battery Charger CG-800E/CG-800, Canon HDMI cable HTC-100/HTC-100S, Canon Tele Converter TL-H58, Canon Wide Attachment WA-H58, Canon Shoulder Strap SS-600/SS-650, Wrist Strap WS-20, 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 CA-910/920/930 (for charging BP-900 series), Canon Interface Cable IFC-300PCU/S / IFC-400PCU

Power Source

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

Power Consumption: UHD:

MP4, 150Mbps 25.00P : Approx. 4.5W

XF-AVC, 160Mbps 25.00P : Approx 4.5W

Full HD:

MP4, 35Mbps 50.00P : Approx. 4.6W

XF-AVC, 45Mbps 50.00P : Approx. 4.6W

Recording Time: UHD

MP4: 150Mbps/25.00p: Max. 165 mins (BP-820), typical 95 mins /

Max. 240 Mins, typical 140 mins (Optional BP-828)



XF-AVC: 160Mbps/25.00P: Max. 160 mins (BP-820), typical 95 mins.

Max. 230 mins, typical 145 mins (Optional BP-828)

Physical Specifications

Dimensions:	Approx. 109 x 84 x 182 mm (main body only)
	Approx. 131 x 180 x 231 mm
	(Including lens hood, BP-820, mic holder unit, and handle unit)
Weight (Body Only):	Approx. 750g
Weight (Accessories):	Approx. 1140g
Operating Temperature Range:	0°C to +40°C, 85% relative humidity