

IMAGE SENSOR

Sensor	Full Frame Back-Side Illuminated (BSI) CMOS sensor
System	RGB primary color filter (Bayer array)
Sensor Modes	Full Frame / Super 35mm (Crop) / Super 16mm (Crop)
Total Pixels	Approx. 26.67 megapixels (6202 x 4300)
Effective Pixels	Approx. 19.05 megapixels (6008 x 3170) : When 6000 x 3164 / 4096 x 2160 / 2048 x 1080 is selected as the resolution Approx. 17.86 megapixels (5633 x 3170) : When 3840 x 2160 / 1920 x 1080 is selected as the resolution
Effective Sensor Screen Size	Full Frame: 38.4 x 20.2 mm (40.7 mm on the diagonal) : When 6000 x 3164 / 4096 x 2160 / 2048 x 1080 is selected as the resolution 36.0 x 20.2 mm (38.7 mm on the diagonal) : When 3840 x 2160 / 1920 x 1080 is selected as the resolution
Dynamic Range	Canon Log 2 : 1600% / 16 stops (at ISO 800) Canon Log 3 : 1600% / 14 stops (at ISO 800) Base ISO : 800 / 3200 / 12800

IMAGE PROCESSOR

Type DIGIC DV7

LENS

Lens Mount	Canon RF mount PL mount support via PL-RF Mount Adapter EF mount support via EF-EOS R Mount Adapters
Lens Magnification Factor	Full Frame; 4096 x 2160 or 2048 x 1080 : Actual focal length x Approx. 1.06 3840 x 2160 or 1920 x 1080 : Actual focal length x Approx. 1.12 Super 35mm (Crop); 4096 x 2160 or 2048 x 1080 : Actual focal length x Approx. 1.46 3840 x 2160 or 1920 x 1080 : Actual focal length x Approx. 1.54

Digital Lens Correction

Peripheral Illumination Correction
Chromatic Aberration Correction
Diffraction Correction
Distortion Correction (RF lenses only)

ND Filter

2, 4 or 6 Stops. Up to 10 stops via built in ND filter system (in extended mode)

Iris Control (EF Mount Lenses)

1/2-stop, 1/3-stop or FINE control
Auto Iris

Cooke/i Technology Support™

Only when equipped with Mount Adapter PL-RF

Anamorphic Lens Support

x2.0 / x1.8 / x1.3

Image Stabilization System

5-Axis Combination IS (Optical and Digital) with supported lenses
Digital 5-Axis IS for non IS lenses.

RECORDING

Internal Recording Media¹

1x CFexpress 2.0 (Type-B)
1x SD Card (SD / SDHC / SDXC)

Recording Time²

Cinema RAW Light LT : 6000 x 3164 576 Mbps : approx. 118 Mins
Cinema RAW Light ST : 6000 x 3164 886 Mbps : approx. 77 Mins
Cinema RAW Light HQ : 6000 x 3164 1800 Mbps : approx. 37 Mins
XF-AVC : 4096 x 2160 500 Mbps : approx. 136 Mins
XF-AVC S : 4096 x 2160 500 Mbps : approx. 136 Mins
XF-HEVC S : 4096 x 2160 135 Mbps : approx. 505 Mins

Recording Formats

Relay Recording³

Double Slot (Simultaneous) Recording

Simultaneous Recording in Multiple Formats

System Frequency / Frame Rates

Cinema RAW Light Bit Rate / Bit Depth (PAL)

Cinema RAW Light (CRM), XF-AVC (MXF), XF-AVC S (MP4), XF-HEVC S (MP4)

Yes

Yes

Yes

59.94 Hz mode (59.94P / 59.94i / 29.97P / 23.98P)
50.00 Hz mode (50.00P / 50.00i / 25.00P)
24.00 Hz mode (24.00P)

12-bit Cinema RAW Light LT :
FF / 6000 x 3164 / 50P [1160 Mbps]
FF / 6000 x 3164 / 25P [576 Mbps]
S35 / 4368 x 2304 / 50P [611 Mbps]
S35 / 4368 x 2304 / 25P [306 Mbps]
S16 / 2184 x 1152 / 50P [154 Mbps]
S16 / 2184 x 1152 / 25P [77 Mbps]

12-bit Cinema RAW Light ST :
FF / 6000 x 3164 / 50P [1780 Mbps]
FF / 6000 x 3164 / 25P [886 Mbps]
S35 / 4368 x 2304 / 50P [939 Mbps]
S35 / 4368 x 2304 / 25P [470 Mbps]
S16 / 2184 x 1152 / 50P [236 Mbps]
S16 / 2184 x 1152 / 25P [118 Mbps]

12-bit Cinema RAW Light HQ :
FF / 6000 x 3164 / 25P [1800 Mbps]
S35 / 4368 x 2304 / 50P [1910 Mbps]
S35 / 4368 x 2304 / 25P [954 Mbps]
S16 / 2184 x 1152 / 50P [479 Mbps]
S16 / 2184 x 1152 / 25P [240 Mbps]

XF-AVC Recording Bit Rate / Sampling (PAL / MXF)

4:2:2 10-bit (Intra-frame) :
4096 x 2160 or 3840 x 2160 / 50P [1000 / 750 / 500 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [500 / 375 / 250 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [250 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [125 Mbps]

XF-AVC S Recording Bit Rate / Sampling (PAL / MP4)

4:2:2 10-bit (Long GOP) :
4096 x 2160 or 3840 x 2160 / 50P [250 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [150 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [50 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [25 Mbps]

4:2:2 10-bit (Intra-frame) :
4096 x 2160 or 3840 x 2160 / 50P [1000 / 750 / 500 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [500 / 375 / 250 Mbps]

2048 x 1080 or 1920 x 1080 / 50P [250 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [125 Mbps]

4:2:2 10-bit (Long GOP) :
4096 x 2160 or 3840 x 2160 / 50P [250 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [150 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [50 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [25 Mbps]

XF-HEVC S Recording Bit Rate / Sampling (PAL / MP4)

4:2:0 8-bit (Long GOP) :
4096 x 2160 or 3840 x 2160 / 50P [150 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [100 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [35 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [35 Mbps]

XF-HEVC S Recording Bit Rate / Sampling (PAL / MP4)

4:2:2 10-bit (Long GOP) :
4096 x 2160 or 3840 x 2160 / 50P [225 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [135 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [50 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [50 Mbps]

Proxy Recording Bit Rate / Sampling (PAL)⁴4:2:0

4:2:0 10-bit (Long GOP) :
4096 x 2160 or 3840 x 2160 / 50P [150 Mbps]
4096 x 2160 or 3840 x 2160 / 25P [100 Mbps]
2048 x 1080 or 1920 x 1080 / 50P [35 Mbps]
2048 x 1080 or 1920 x 1080 / 25P [35 Mbps]

4:2:0 8-bit (Long GOP) :
2048 x 1080 or 1920 x 1080 35 / 16 / 9 Mbps
1280 x 720 [6 Mbps]

Slow / Fast Motion⁵

10-bit (Long GOP) :
2048 x 1080 or 1920 x 1080 [16 / 9 Mbps]

6K RAW : up to 60FPS
4K : up to 120FPS
4.3K RAW (S35 Crop) : up to 100FPS
2K (S16 Crop) : up to 180 FPS

Interval Record	Yes
Frame Record	Yes
Pre Record (Cache Record)⁶	3 Seconds
Digital Tele-converter	1.5x, 2x, 2.5x, 3x, Off
Photo Storage Media	SD Card
Photo Recording Size⁷	4096 x 2160 / 3840 x 2160 / 2048 x 1080 / 1920 x 1080
SYSTEM	
Display Type	3.5 inch LCD Touch Panel
Display Resolution	approx. 2.76 million dots (1280 x RGB x 720)
Display Touch Screen Functions	Focus Point Selection Touch Screen UI for Shooting Settings
OSD for Vertical Shooting	Yes
Wave Form Monitor	Yes (Line / Line + Spot / RGB Parade / YPrPb Parade)
False Colour Display (Exposure Indication)	Yes (6 Colour Index)
Colour Bars	SMPTE / EBU / ARIB
Peaking	Peaking 1, Peaking 2 (Colour, Gain, Frequency customisable)
Zebra	Level 1; Level 2; Both
Markers	On / Off selectable: centre, horizontal / vertical, grid, aspect, safe area and user marker. Colour selectable
EVF	
Built-In EVF	No
INPUTS / OUTPUTS	
Audio In	2x Mini XLR 3-pin connector 1x 3.5 mm stereo mini jack Built in Stereo microphones on camera body
Headphone Output	1x 3.5mm stereo mini jack
Video Monitor Output	1x 3G-SDI Output (BNC)
HDMI	1x HDMI (Type-A)
USB	1x USB-C Data Terminal (USB 3.2 Gen1)
SDI Output	1x 12G-SDI Output (BNC)
Time Code	1x DIN1.0 / 2.3 (Input / Output)
Genlock	1x DIN1.0 / 2.3 (shared with Sync & Return)
Sync	1x DIN1.0 / 2.3 (shared with Genlock & Return)
DC Input	12V (4-pin XLR / 11.5-20V)
Multi-Accessory Shoe	Yes (via camera body or top handle)
Remote Control Terminal	1x 2.5 mm stereo mini jack
Lens Terminal	1x 12-pin jack
Ethernet Terminal	1x RJ45 Connector (1000BASE-T compatible)
Grip	1x USB-C Terminal (for supplied Hand Grip only)
IP Streaming / FTP	IP Streaming via Ethernet / Wi-Fi connection 9 Mbps / 4 Mbps: 1920 x 1080 (59.94p / 59.94i / 50.00p / 50.00i) UDP / RTP / SRT / RTP+FEC / RTSP+RTP
User LUT Input	Yes, in-built LUTs available for monitoring. Custom LUTs can be applied directly to internal recordings via Look File function (compatible with 17 or 33 grid .cube files)
Video Connector	1x USB-C Terminal (for supplied LCD Monitor only)
Tally Signal	Yes, via Wi-Fi or Ethernet using XC Protocol
Return Signal Input	1x DIN1.0/2.3 (shared with Genlock & Sync)

Default Function Button Settings

1. MAGN.
2. PEAKING
3. WFM
4. S&F
5. ISO / GAIN
6. SHUTTER
7. S&F FPS
8. AUDIO STATUS
9. WB
10. SET WB
11. FUNC
12. (unassigned)
13. AF LOCK

User Assignable Buttons

13x (Body) / 3x (Hand Grip) / 2x (LCD Monitor)

MISCELLANEOUS

Tally Lamp

Yes, 2x

Custom Dial

Yes, 3x

Software Application Support

Cinema RAW Development
XF Utility
EOS VR Utility
Remote Camera Control Application
RAW Plugin for Avid Media Access
RAW Plugin for Final Cut Pro
XF Plugin for Avid Media Access
EOS VR Plugin for Adobe Premiere Pro
CV Metadata Plugin for Adobe After Effects
Live Link Plugin for Unreal Engine
CV Metadata Extraction Tool
MP4 Join Tool
HEVC Activator
Canon Multi-Camera Control
Content Transfer Professional
Browser Remote Control

Smartphone Application Support

EXPOSURE

Exposure Metering

Standard / Spotlight / Backlight

Exposure Compensation

AE shift function available.
Target value
(±8 steps from center)

Auto Exposure Mode

Auto Iris / Auto ISO

Push Auto Iris

Yes

Exposure Lock

No

Auto Gain Control Setting

Yes

ISO Sensitivity⁸

1-Stop Display :
100* / 160** / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 / 25600 / 51200 / 102400*
1/3-Stop Display :
100* / 125* / 160 / 200 / 250 / 320 / 400 / 500 / 640 / 800 / 1000 / 1250 / 1600 / 2000 / 2500 / 3200 / 4000 / 5000 / 6400 / 8000 / 10000 / 12800 / 16000 / 20000 / 25600 / 32000 / 40000 / 51200 / 64000* / 80000* / 102400*

*when ISO Extended Range is set to ON

**when ISO Extended Range is set to OFF

Dual Pixel CMOS AF II + EOS iTR AF X

Auto Focus System

AF Frame Sizes

Full: approx. 100% (Vertical) x approx. 100% (Horizontal)
Large Zone (Vertical) : Video display range approx. 97% (Vertical) x 25% (Horizontal)
Large Zone (Horizontal) : Video display range approx. 43% (Vertical) x 76% (Horizontal)
Zone: Video display range approx. 43% (Vertical) x 25% (Horizontal)
Small Zone : Video display range approx. 15.9% (Vertical) x 11.8% (Horizontal)
Continuous AF / One-Shot AF

Auto Focus Modes

Face Detection AF

Yes (Eye / Face / Head / Body)

Animal Detection AF

Yes (Dogs / Cats)

Focus Guide

Yes, with compatible Canon lenses

Gain Setting⁹

-6dB*, -3dB*, -2dB**~48dB, 51dB*, 54dB*

*when ISO Extended Range is set to ON

**when ISO Extended Range is set to OFF

SHUTTER

Control Modes	Speed / Angle / Clear Scan / Slow Shutter
Shutter Speed	1/1 ~ 1/2000 (total of 45 settings)
Shutter Angle	11.25° to 360° depending on frame rate
Slow Shutter (SLS)	1/3, 1/4, 1/6, 1/8, 1/12, 1/15, 1/25, 1/30 depending on frame rate
Clear Scan	23.97 Hz ~ 2000 Hz depending on sensor mode / frame rate

CUSTOM PICTURE

Stored Configurations	C1 : Canon 709 C2 : Canon Log 2 C3 : Canon Log 3 C4 : BT.709 Wide DR C5 : BT.709 Standard C6 : PQ C7 : HLG C8 : EOS Standard C9 : EOS Neutral C10 : User10 ~ User20
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HDR-HLG Profile

BT.2100 : Corresponds to ITU-R BT.2100
Vivid : Corresponds to Traditional Colour in ITU-R BT.2390

Colour Matrix

Neutral : Accurate colour reproduction
Production Camera : Colour reproduction for use in movie production
Video : Colour reproduction with contrast for TV broadcasts.

Image Adjustment Parameters

Master Pedestal
Master Black
Black Gamma
Low Key Saturation
Knee
Sharpness
Noise Reduction
Skin Detail
Colour Matrix Tuning
White Balance
Colour Correction

WI-FI & GPS SPECIFICATIONS

Wi-Fi (Optional Third Party Accessory)

In-built (2.4 / 5GHz bands)
Supporting 802.11a/b/g/n/ac

GPS Information (Optional Accessory)

Only when equipped with GP-E2 GPS Receiver)

WHITE BALANCE

Auto	Yes
Preset	Daylight (5600K), Tungsten (3200K), Kelvin (2000K-15000K, 100K intervals), Set A, Set B
White Balance Shift	-5 CC - +5 CC (Daylight / Tungsten) -20 CC - +20 CC (Kelvin)

TIME CODE

Count Up System	Regen / RecRun / Free Run / External / Frame Count
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AUDIO

Recording Format	RAW / XF-AVC : Linear PCM (24-bit / 48 kHz, 4 channels) XF-AVC S / XF-HEVC S : Linear PCM (24-bit / 48 kHz, 4 channels) or MPEG2-AAC LC (16-bit 48kHz) 2 channels
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ACCESSORIES

Supplied

LCD Monitor
LCD Attachment Unit
MC-5U Monitor Cable
Handle Unit
Camera Grip
BP-A60N Battery Pack
CA-CP300 B Compact Power Adapter
CG-A20 Battery Charger
Microphone Holder

Optional

BP-A60N / BP-A30N Battery Pack
BP-A30 / BP-A60 Battery Pack
CG-A20 / CG-A10 Battery Charger
CA-CP300 B Compact Power Adapter
MC-5U Monitor Cable
PL-RF Mount Adapter
EF-EOS R Mount Adapter
EF-EOS R Control Ring Mount Adapter
EF-EOS R Drop-In Filter Mount Adapter
EF-EOS R 0.71x Mount Adapter
Remote Camera Controller RC-V100
Remote Camera Controller RC-IP100
Remote Camera Controller RC-IP1000
DM-E1D Multi-Function Shoe Directional Stereo Microphone OC-E4A Off-Camera Shoe Cord
IFC-100U / IFC-400U Interface Cable
Tascam CA-XLR2d XLR Microphone Adapter

Third Party Accessories

POWER SOURCE

Power Supply (Battery)¹⁰

BP-A60N (Supplied)
BP-A30N / BP-A30* / BP-A60* (Optional)
DC IN 12V terminal : DC 11.5V - 20V (4-pin XLR)
Cinema RAW Light: FF / 6K / 59.94P - 32.5W
Cinema RAW Light: S35 / 4.3K / 59.94P - 30.4W
XF-AVC: FF / 4K / 59.94P - 31.6W
XF-AVC: FF / 2K / 59.94P - 29.7W

Power supply (Mains)

Power Consumption

Recording Time

With supplied BP-A60N battery pack:
Approx. 155 - 170mins (depending on recording mode)

PHYSICAL SPECIFICATIONS

Dimensions

Approx. 142 x 135 x 135 mm

Weight (Body Only)

Approx. 1540 g

Weight (Accessories)

LCD Monitor: Approx. 155g
LCD Attachment Unit: 260g
MC-5U Monitor Cable: Approx. 25g
Handle Unit: Approx. 300g
Camera Grip: Approx. 270 g
BP-A60N Battery Pack: Approx. 465g
CA-CP300 B Compact Power Adapter: Approx. 219g
Battery Charger CG-A20: Approx. 145g
Microphone Holder + 2 screws: Approx. 60g
Approx. 0 to 40°C, (85% relative humidity)
Approx. -5 to 45°C, (60% relative humidity)

Operating Temperature Range