

XF405 / XF400

1.0-Type CMOS COMPACT CAMCORDER OFFERING 4K UHD/50P WITH DUAL PIXEL CMOS AF



- 4K UHD/50P recording on SD cards with high frame rates
- High quality 4K lens with 15x zoom
- Dual Pixel CMOS AF for high-speed, precise autofocus
- Network capability with FTP transfer and remote control
- Compact and lightweight body, professional operability

Offering broadcast quality UHD and Full HD capability into a handheld, lightweight body with a 1.0-Type CMOS sensor, a 15x 4K zoom lens and Dual Pixel CMOS AF, the XF405 /XF400 produces outstanding clarity and sharpness. With the addition of a 100P high frame rate and network capability for FTP transfer and remote control, this camcorder is ideal for newsgathering, documentary or corporate use.



PRODUCT RANGE



XF405 / XF400 (4K)



XC15 (4K)



XC10 (4K)

XF405 / XF400 (4K)

XC15 (4K)

XC10 (4K)

XF305 / XF300

XF205 / XF200

XF105 / XF100

XA35 / XA30

XA15 / XA11

Canon

TECHNICAL SPECIFICATIONS

XF405 / XF400

CAMERA

IMAGE SENSOR

Sensor
Filter
Total pixels
Effective pixels per sensor
Subject illumination range
Minimum illumination (PAL/50.00Hz Mode)

1.0 - type CMOS
RGB Primary Colour Filter
13.4 MP
8.29 MP
Approx. 0.1 lx to 100,000 lx
Approx. 1.4 lx, P Mode (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
Focal length
Minimum focus distance
ND filter

15 x Optical
Approx. 25.5 to 382.5 mm
10 mm at wide end, 60 cm across entire zooming range
3 densities: turret switched, motor-driven.
Each press of the ND button will switch the display
between ND 1/4, ND 1/16, and ND 1/64.

Zoom control

Via Zoom Rocker Switch, Lens Control ring or
Remote Control

Zoom speed

Selectable. Variable or constant speed. Fast, Normal
or Slow speed.

Focus control

Manual via Lens Ring, Dual Pixel CMOS AF,
Face Only, Face Priority

Iris control

Manual via Iris Control Dial, Auto

Aperture range

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

Filter diameter

58mm

Lens elements/groups

14 groups of 18 elements (double aspherical lenses
and single Hi-UD lenses)

Aperture blades

9 Blades

Image stabilization system

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

Digital zoom/Teleconverter

Yes. 300 X Digital Zoom, 2 X Digital Teleconverter.

IMAGE PROCESSOR

Type

Dual DIGIC DV6

Dynamic Range

12 stops (800%) in Wide DR mode

Sampling accuracy

YCC 4:2:0

Bit depth

8 bit

Looks settings

Standard, Wide DR, Monochrome

RECORDING

Video storage media

SD/SDHC/SDXC card

Type

Class U3 recommended for recording at 150MBPS

Recording time (64GB Card, approx.)

150 Mbps: 55 Minutes, 35Mbps: 240 Mins

Recording file system

FAT32/exFAT

Internal Recording format

MP4 3840x2160 (150 Mbps) / 1920x1080
(35/17 Mbps) / 1280x720 (8/4 Mbps)
NTSC: 59.94P / 29.97P / 23.98P
PAL: 50.00P / 25.00P depending on recording
resolution selected

External Recording Output

SDI: XF405 Only
NTSC: 1920x1080 59.94P YCC422 10bit / 1920x1080
29.97P YCC422 10bit
PAL: 1920x1080 50.00P YCC422 10bit / 1920x1080
25.00P YCC422 10bit
HDMI: XF405 and XF400
NTSC: 3840x2160 59.94P YCC420 8bit / 1920x1080
59.94P YCC422 10bit /
3840x2160 29.97P YCC422 8bit / 1920x1080 29.97P
YCC422 10bit
PAL:
3840x2160 50.00P YCC420 8bit / 1920x1080 50.00P
YCC422 10bit / 3840x2160 25.00P YCC422 8bit /
1920x1080 25.00P YCC422 10bit

Recording frame rate (PAL Mode)

50.00P/25.00P

Slow/Fast motion (PAL/50.00Hz Mode)

Yes.
3840 x 2160: 50.00P: x2, x4, x10, x20, x60, x120, x600,
x1200
25.00P: x0.5
1920 x 1080: 50.00P: x0.5, x2, x4, x10, x20, x60, x120, x600,
x1200
25.00P: x0.25, x0.5
1280 x 720: 50.00P/8Mbps: x2, x4, x10, x20, x60, x120,
x600, x1200
25.00P/4Mbps: x0.5

Interval Record

No

Frame Record

No

Pre Record (cache record)

Yes. 3 Seconds

Scan Reverse

No

Still quality

3840x2160 / 1920x1080 / 1280x720
(Still image resolution is dependent on the video
resolution)

Photo storage media

SD Card

AUDIO

Recording Control

MPEG-4 AAC-LC (16-bit 2CH) / LPCM (16-bit 4CH)

Reference Tone

Manual or Auto

Microphone level meter

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

Yes

SYSTEM

PANEL

Type

LCD Capacitive touch panel

Size

3.5-inch (8.9 cm)

Dots

(approx. 1.56 million dots)

Adjustable

Yes

Waveform Monitor

No

Focus Assist

Yes. Focus Guide Function in MF

Peaking

Yes. Selectable Peaking Colour: Red / Blue / Yellow

Zebra

Yes. 70%, 100%

Markers

Yes. Horizontal (grey) / Horizontal (white) / Grid (grey)
/ Grid (white)

CVF

Size

0.24-inch

Dots

approx. 1.56 million dots

Adjustable

Yes

Viewing Angle

100%

Correction lens

+.2.0 - -5 diopter

INPUTS/OUTPUTS

Audio in

XLR 3-pin jacks (x2), balanced on Handle Unit. 3.5mm
Stereo jack (unbalanced) on camera body

Yes. 3.5mm

Headphone output

No

Video monitor output

No

HDMI

Yes.

USB

Yes. Min-B and Hi-Speed USB supported

SDI output

Yes. BNC Connector (XF405 only)

Time code

No. Timecode out via HDMI is possible

Genlock

No

LAN

Yes. Ethernet connector (RJ45) (supports 1000 BASE-T)

AV terminal

No

DC input

Yes. 3.4mm Jack

Remote Control Terminal

Yes. 2.5mm mini jack

SHOOTING FUNCTIONS

EXPOSURE

Exposure metering

Centre-weighted average metering: In the AUTO, P,
Av, Tv, Portrait, Sports, Low Light
and IR modes Segment evaluative metering: Snow,
Beach, Sunset, Spotlight, Night modes
No metering: Fireworks; Fixed exposure [1/60 sec.
(PAL: 1/50 sec.)],
M (manual exposure)

Exposure compensation

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

Auto Exposure mode

P, Tv, Av.), SCN (Portrait, Sports, Snow, Beach, Sunset,
Night, Low Light, Spotlight, Fireworks)

Auto Gain Control setting

Yes

Auto Gain Control limit

In manual exposure (P, Av, and Tv modes): 0-29 dB
(in 1 dB increments)

Not wide DR mode, not S&F x 1/4: 0-29 dB
(in 1 dB increments)

Not wide DR mode, S&F x 1/4: 9-29 dB
(in 1 dB increments)

Wide DR mode, not S&F x 1/4: 9-29 dB
(in 1 dB increments)

Wide DR mode, S&F x 1/4: 18-29 dB
(in 1 dB increments)



TECHNICAL SPECIFICATIONS

XF405 / XF400

Gain setting	M (Manual) shooting, Not wide DR: 0-39 dB (1 dB increments) Wide DR: 9 - 39 dB (1 dB increments) (Some of the above values include TBD items.)	TIME CODE	Rec Run / Free Run 00:00:00:00 - 23:59:59:29 (PAL 23:59:59:24) DF / NDF Setting (00 00 00 00 - FF FF FF FF) / Time / Date
WHITE BALANCE		Count up system	
Setting	Auto, Manual	Start value setting	
Preset	Daylight: 5,600 K, Tungsten: 3,200. Default value for set 1, set 2: 5,600 K Colour temperature (Kelvin) setting ranges from 2,000 K to 15,000 K.	Drop Frame	
		User BIT Type	
SHUTTER SPEED		ACCESSORIES	
Control Modes	Manual, Tv, Auto, P Mode	Supplied	Lens hood with barrier, Mic holder unit (w/ screw), Handle unit, Wireless Controller (WL-D89), Lithium battery (CR2025), AC adapter (CA-946), Battery Pack BP-828, AC Cable, Lens Cap Canon Battery Pack BP-820/BP-828 Canon AC Adapter CA-946 (included with XF405) Canon Battery Charger C.G-800/CG-800E, Canon High speed HDMI cable HTC-100, Canon High speed HDMI cable HTC-100/ High speed HDMI cable HTC-100/S, 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-XX Canon PROTECT filter 58 mm, Canon ND4-L filter 58 mm Canon ND8-L filter 58 mm, Canon GPS Receiver GP-E2 Canon Remote Controller RC-V100, Canon Battery Video Light VL-10Li/VL-10LiLi Canon Battery Pack BP-900 series (for VL-10Li/VL-10LiLi), 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 The asterisks (*) indicate new accessories.
Shutter speed (PAL)	1/2 - 1/2000 sec	Optional Accessories (Includes items not currently on sale)	
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	BATTERY	
INFRARED		Power Consumption	8.4W (MP4, 3840 x 2160, 50.00P Panel in use)
Infrared shooting mode	Yes	Battery Pack	Canon Battery Pack BP-828 (supplied) BP-820 (Optional)
Built-in IR lamp	Yes, in Handle Unit	Continuous Recording Time (approx.)	BP-828: 125 mins (MP4, 3840 x 2160, 50.00P Panel in use)
MISC.		MISCELLANEOUS	
Tally lamp	Yes	Dimensions	Approx. 150 x 216 x 267 mm (approx. 5.9 x 8.5 x 10.5 in.) [Including lens hood, BP-828, mic holder unit, and handle unit]
Colour Bars	EBU / SMPTE (PAL); SMPTE / ARIB (NTSC)	Weight (camera only)	XF405: 1150g (2.5 lb) XF400: 1145g (2.5 lb)
Accessory shoe	Cold Shoe	Weight (fully equipped)	XF405: 1670g (3.7 lb) XF400: 1665g (3.7 lb) Camera, Lens Hood, Handle Unit, BP-828 battery, 1 SD card
Custom Button Assignment	Yes. 5 assignable buttons. Powered IS / BLC Always On / Face Only AF / WB Priority / Pre Rec / IR Light / Audio Output CH / Focus Guide / [AF/MF] / Rec Review / Enlarged Display / PHOTO / Off	Operating Temperature range	Approx. 0 to 40 °C, 85 % (relative humidity) Approx. -5 to 45 °C, 60 % (relative humidity)
Custom Dial	Yes. [Av / Tv / M] / Exposure Compensation / AGC Limit / Off	Footnotes	All specifications are subject to change without notice
Wireless LAN standards	IEEE802.11b/g/n/a (2.4 GHz/5 GHz)		
Supported Wi-Fi Functions	Browser Remote. (Camera Mode) FTP file transfer (Media Mode)		
Supported Browser for Remote Operation	Internet Explorer 8 or later, Safari (iOS 9 or 10), Safari (MacOS), Android standard browser Android 4.4 - 6.0		
Remote Operation Control Features	1) Aperture (including ND control) 2) Focus The amount by which the focus is driven toward NEAR and toward FAR can each be controlled in 3 steps. 3) White balance 4) Shutter speed 5) Gain 6) Exposure compensation 7) Shooting mode 8) Zooming and SLOT SELECT control can be exercised. The free memory remaining on the media, time code, remaining battery charge, etc. can be checked. Live View.		
Live view image Resolution	Camera setting mode: 680 x 383 Simplified setting mode: 284 x 160		
Encryption	When Wi-Fi has been set manually in the XF405, select "Open Encoding," "Open WEP," "Shared key/WEP", "WPA, WPA2-PSK," or "WPA2-PSK AES." (*1) At the WPS setting stage, the settings are established automatically according to the authentication and encryption systems set at the access point.		
GPS Information (Optional Accessory)	Location (latitude, longitude and altitude) as well as the GPS information while using Coordinated Universal Time (UTC) can be added to MP4 movies and photos. Also, based on this information, the satellite data acquisition status can be checked in camera mode.		

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