

Camera	
Image Sensor	
Sensor	1/3 type HD CMOS Pro
System	Bayer pattern filter
Total pixels per sensor	2.37 megapixels
Effective pixels per sensor	2.07 megapixels
Horizontal Resolution	900 TV lines or more (1920 x 1080i mode)
Lens	
Zoom ratio	10x
Focal length	4.25 - 42.5mm (35mm equivalent: 30.4 - 304mm)
Minimum focus distance	60cm (throughout zoom range); 20mm (wide angle)
ND filter	Built-in gradation filter (Auto or Off)
Zoom control	Slider or Handle; Selectable Shockless Zoom mode.
Zoom speed	Zoom Slider: Variable speed/Fixed speed (Fast/Normal/Slow, 16 speed level settings available in each mode); Handle zoom: Fixed speed (Fast/Normal/Slow, 16 speed level settings available in each mode)
Focus control	MANUAL: Lens ring, Touchscreen LCD (touch Focus, Touch and Track), Focus Preset AUTO: Face Priority AF / Face Only AF / Instant AF / Medium AF / TV AF
Iris control	MANUAL: Custom dial control; Touchscreen control AUTO: YES
Aperture range	f1.8 - f8
Filter diameter	58mm
Lens elements/groups	12/10
Aperture blades	8
Image stabilization system	Optical lens shift system (angle & vector movement detection); 3 modes: Dynamic, Standard, Powered
Digital zoom	2x
Image Processor	
Type	DIGIC DV III
Recording	
Video storage media	64GB built-in flash memory; SDXC/SDHC/SD memory card (2 card slots); Double slot (simultaneous) recording and Relay (continuous) recording possible. ¹
Type	Class 4 or higher SDHC card required for 1920x1080 recording
Recording time	64GB internal memory or SDXC card: 5hrs 55mins (MXP mode, max. quality) ¹ 24hrs 30mins (LP mode, lowest quality) ¹
Recording file format	AVCHD high profile (MPEG4-AVC/H.264)
Recording format	AVCHD (all modes variable bit rate, 4:2:0 colour sampling) MXP: 1920x1080, 24Mbps; FXP: 1920x1080, 17Mbps; XP+: 1440x1080, 12Mbps; SP: 1440x1080, 7Mbps; LP: 1440x1080, 5Mbps
Recording frame rate	1920 x 1080/50i; 1920 x 1080/25p (50i recorded stream)
Slow/Fast motion	NO
Interval Record	NO
Frame Record	NO
Pre Record (cache record)	YES (3 seconds)
Scan Reverse	YES. Up/down, left/right, up/down/left/right image inversion.
HD->SD conversion	YES (during playback)
Internal Data Transfer	MOVIE & STILLS: Yes (internal memory to card, card to card)
Photo storage media	SDXC/SDHC/SD memory card
Still quality	During video recording or playback: 1920 x 1080
System	
LCD	
Size	8.8cm (3.5"), 100% view
Dots	922,000
Image quality adjustments	Brightness, backlight
Adjustable	YES (270 degree rotation about horizontal axis)
Waveform Monitor	YES
Focus Assist	Peaking; Magnifying; Edge Monitor (using waveform display)
Peaking	YES
Zebra	YES (70% or 100% reference level)
Markers	ON/OFF (Grid, Horizontal, Centre)

EVF	
Size	0.61cm (0.24"), 100% view
Dots	260,000
Correction lens	+ 2.0 to -5.5 diopter
Inputs/Outputs	
Audio in	XLR inputs with 48V phantom power (x2), 3.5mm microphone input jack
Headphone output	3.5mm stereo jack
Video monitor output	NO
HDMI	YES (HDMI™ Mini Connector: v1.3, out only, 1080/50p output possible)
IEEE 1394 (Firewire)	NO
USB	YES (Mini-B, USB 2.0 Hi-Speed)
HD/SD-SDI output	NO
Time code	NO
Genlock	NO
Component out	YES (output only)
AV terminal	3.5mm mini jack (output only for video and audio)
DC input	YES
Remote Control Terminal	2.5mm mini jack
Colour Bars	YES (SMPTE)
Misc	
Tally lamp	YES
Accessory shoe	YES (cold shoe)
Custom key	YES (2 assignable buttons; select from 9 functions)
Custom Dial	YES (Shutter Priority (Tv), Aperture Priority (Av), Manual Exposure, exposure compensation, AGC limit)
Shooting Functions	
Exposure	
Exposure metering	Centre-weighted average or segment evaluative (determined by shooting mode)
Exposure compensation	-2 to +2 EV (13 steps)
Auto Exposure mode	Smart Auto, Face Detection AE; Manual control via Touch Exposure and Exposure Compensation functions.
Push Auto Iris	NO
Exposure Lock	YES
Auto Gain Control setting	Full Auto / AGC On / Manual
Auto Gain Control limit	0 to 24dB, 1dB increments (0 to 18dB in Cinema Mode)
Gain setting	0 to 24dB, 1dB increments
Shutter Speed	
Control Modes	Full Auto / Manual control (touchscreen LCD or control dial)
Shutter speed	1/6 to 1/2000 (depending on Scene Mode and frame rate)
Slow Shutter (SLS)	1/2 to 1/500 (Low Light Scene Mode)
Clear Scan	NO
Infrared	
Infrared shooting mode	YES (green or white)
Built-in IR lamp	YES
3D Shooting Assist	
OIS Axis Shift	NO
Focal Length Guide	NO
Shooting Modes	
Smart AUTO	YES (38 scenes)
Program AE	AUTO; M mode: P, Tv, Av, M (manual exposure), SCN (Portrait, Sports, Snow, Beach, Sunset, Night, Low Light, Spotlight, Fireworks); Cinema mode: P, Tv, Av, M
Cinema Features	Cinema-Look Filter (9 options, including customisable 'Cinema Standard'), Story Creator, Touch Decoration
Image Effects	Brightness, Contrast, Sharpness, Colour Depth
White Balance	
Auto	YES
Preset	Set 1, Set 2, Preset (Daylight, Shade, Cloudy, Tungsten (incandescent lamps and halogen bulbs), Fluorescent H (3-wavelength type fluorescent), Fluorescent (white fluorescent)), Colour Temperature
Time Code	
Countup system	N/A
Start value setting	N/A
Audio	
Recording	Dolby Digital 2ch (AC-3 2ch), 48kHz sampling
Control	Audio limiter, Auto/manual settings via control dials on handle
Microphone attenuation	YES
Microphone level meter	YES
Zoom Microphone	YES (customisable frequency response and directivity)
Accessories	
Supplied	Lens hood; WL-D89 Wireless Controller; CA-570 Compact Power Adapter; BP-808 Battery Pack; Stereo Video Cable and Interface Cable set; Component Cable CTC-100/S; Stylus pen; PIXELA Transfer Utility software disc.
Optional	Wide Converter WD-H58W, Teleconverter TL-H58, 58mm lens filters, Batteries BP-808/BP-819/BP-827, Battery Charger CG-800, Video Light VL Li II, Remote Control ZR-2000, Component Cable CTC-100, HDMI cable HTC-100, Wireless Microphone WM-V1.

Battery	
Backup power supply	Lithium coin battery (built-in)
Miscellaneous	
Detachable handle	YES
Operating Temperature range	-5°C to +45°C, 60% relative humidity

Specifications are subject to change without notice.

¹ Recording for more than 12 hours continuously is not possible