

Specifications

As of June, 2017

General

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| Power: | DC 7.28 V (when the battery is used) DC 12 V (when the AC adaptor is used) |
| Power Consumption: | 19.7 W (when the LCD monitor is used) |
| Operating Temperature: | 0 °C to 40 °C (32 °F to 104 °F) |
| Operating Humidity: | 10 % to 80 % (no condensation) |
| Weight: | Body: Approx. 2.0 kg (4.41 lb) (body only, excluding lens hood, battery, and accessories) Shooting: Approx. 2.4 kg (5.29 lb) (including lens hood, battery, and eye cup) |
| Dimensions: | 173 mm (W) x 195 mm (H) x 346 mm (D) (6-13/16 inches x 7-11/16 inches x 13-5/8 inches) (excluding protrusion and eye cup) 173 mm (W) x 195 mm (H) x 392 mm (D) (6-13/16 inches x 7-11/16 inches x 15-7/16 inches) (including eye cup, excluding protrusion) |

Camera Unit

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| Pickup Device: | 1.0-type (effective size) MOS solid state image sensor |
| Effective Pixels: | 8.79 megapixel: UHD/FHD 59.94p/29.97p/23.98p 9.46 megapixel: 4K 24p |
| Lens: | Optical image stabilizer lens, optical 20x motorized zoom F2.8 to F4.5 (f=8.8 mm to 176 mm) 35 mm equivalent: f=25.4 mm to 508.0 mm: UHD/FHD 59.94p/29.97p/23.98p f=24.0 mm to 480.0 mm: 4K24.00p Filter Diameter: 67 mm ND Filter: 4 Positions (OFF, 1/4, 1/16, 1/64) IR Filter: Incorporates the ON/OFF control function Shortest Shooting Distance (M.O.D.): Approx. 1.0 m from the front lens |
| Gain Setting: | L/M/H selector switch Standard mode: 0 dB to 24 dB (Adjustable in 1 dB steps) (Automatic setting can be assigned to L/M/H) Extended ON: -3 dB to 24 dB (Adjustable in 1 dB steps) (Automatic setting can be assigned to L/M/H) 30 dB and 36 dB switched (when assigning [S. GAIN] to the USER button) |
| Color Temperature Setting: | ATW, ATW LOCK, Ach, Bch, preset 3200 K/preset 5600 K/VAR (2000 K to 15000 K) |
| Shutter Speed: | When [SYSTEM MODE] = 59.94 Hz 60i/60p mode: 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. 30p mode: 1/30 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. 24p mode: 1/24 sec., 1/48 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/120 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. When [SYSTEM MODE] = 50.00 Hz 50i/50p mode: 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. 25p mode: 1/25 sec., 1/50 sec., 1/60 sec., 1/100 sec., 1/125 sec., 1/180 sec., 1/250 sec., 1/350 sec., 1/500 sec., 1/750 sec., 1/1000 sec., 1/1500 sec., 1/2000 sec., 1/3000 sec., 1/4000 sec., 1/8000 sec. |
| Shutter Speed: (Slow Shutter) | When [SYSTEM MODE] = 59.94 Hz 60i/60p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec., 1/30 sec., 30p mode: 1/2 sec., 1/4 sec., 1/8 sec., 1/15 sec. 24p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec. When [SYSTEM MODE] = 50.00 Hz 50i/50p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec., 1/25 sec. 25p mode: 1/2 sec., 1/3 sec., 1/6 sec., 1/12 sec. |
| Shutter Speed: (Synchro Scan) | When [SYSTEM MODE] = 59.94 Hz 59.94i/59.94p mode: 1/60.0 sec. to 1/249.7 sec. 29.97p mode: 1/30.0 sec. to 1/249.7 sec. 23.98p mode: 1/24.0 sec. to 1/249.6 sec. 24.00p mode: 1/24.0 sec. to 1/249.9 sec. When [SYSTEM MODE] = 50.00 Hz 50i/50p mode: 1/50.0 sec. to 1/250.0 sec. 25p mode: 1/25.0 sec. to 1/250.0 sec. |
| VFR Recording Frame Rate: | When [SYSTEM MODE] = 59.94 Hz 30p mode: 2, 15, 28, 28, 30, 32, 34, 45, 60 (fps) 24p mode: 2, 12, 20, 22, 24, 26, 28, 36, 48, 60 (fps) SYSTEM MODE = 50.00, Hz 25p mode: 2, 12, 21, 23, 25, 27, 30, 37, 50 (fps) |
| Super-Slow Motion Recording: | When [SYSTEM MODE] = 59.94 Hz Shooting frame rate FHD 120 fps, Slow motion effect 1/4 speed (when 30p mode), 1/5 speed (when 24p mode) When [SYSTEM MODE] = 50.00 Hz Shooting frame rate FHD 100fps, Slow motion effect 1/4 speed (when 25p mode) |
| Sensitivity: | When [HIGH SENS.] mode F11 (2000 lx, 3200 K, 89.9 % reflect, 1080/59.94i) F12 (2000 lx, 3200 K, 89.9 % reflect, 1080/50i) |
| Minimum Subject Illumination: | 0.2 lx (F2.8, gain 18 dB, Manual slow shutter 1/2S, When [HIGH SENS.] mode) |
| Digital Zoom: | 2x/5x/10x, i.Zoom (max. 30x) |
| Lens Hood: | Hood with lens cover |

Memory Card Recorder

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| Recording Media: ^{*1} | SDHC memory card (4 GB to 32 GB), SDXC memory card (48 GB to 128 GB), UHS-I supported |
| Recording Slot: | Slot x 2 |
| System Format: | 59.94 Hz/50 Hz |
| Motion Picture Recording: | Recording Format: MOV, MP4, AVCHD |
| Recording Mode: | Please see page 07 for the Recording Format table. |
| Recording Time: | Please see back cover for the Recording Time table. |
| 2 Slot Functions: | Relay, Simultaneous, Background ^{*2} , Dual codec |
| Still Picture Recording Mode: | JPEG (DCF/Exif2.2) |
| Still Picture Recording: | Motion Picture Playback: 8.8M: 4096 x 2160 (17:9), 8.3M: 3840 x 2160 (16:9), 2.1M: 1920 x 1080 (16:9), 0.9M: 1280 x 720 (16:9) |

Digital Video

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|-----------------------------------|---|
| Video Signal for External Output: | 8bit 4:2:2 ^{*3} |
| Recording Video Signal: | 8bit 4:2:0 |
| Video Compression Format: | MPEG-4 AVC/H.264 High Profile (MOV/MP4/AVCHD) |

Digital Audio

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|-------------------------|-------------------------------------|
| Recording Audio Signal: | 48 kHz/16 bit 2CH |
| Audio Signal Format: | LPCM (MOV/MP4), Dolby Audio (AVCHD) |
| Headroom: | 12 dB |

Dual Codec

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|---------------------------|---|
| Recording Method: | MOV, MP4 |
| Video Compression Format: | MPEG-4 AVC/H.264 High Profile |
| Audio Signal Format: | LPCM |
| Recording Format: | Please see page 08 for the Dual Codec Recording table. |
| Recording Time: | FHD 50Mbps FHD 8Mbps 32 GB: Approx. 1 hour 20 min. Approx. 8 hours 30 min. 64 GB: Approx. 2 hour 40 min. Approx. 17 hours 10 min. 128 GB: Approx. 5 hours 20 min. Approx. 35 hours |

Video Input/Output

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| SDI OUT: | BNC x 1, 0.8 V [p-p], 75 Ω, 3 G/1.5 G, HD SDI, SD SDI supported Output format: 1080/59.94p LEVEL-A/50.00p LEVEL-A, 1080/29.97PsF/25.00PsF/24.00PsF/23.98PsF, 1080/59.94i/50.00i, 720/59.94p/50.00p, 480/59.94i, 576/50.00i |
| VIDEO OUT: | AV connector x 1 |
| HDMI : | Type A connector x 1, VIERA Link not supported Output format: 2160/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p/59.94i/50.00i, 1080/59.94p/50.00p/29.97p/25.00p/24.00p/23.98p/59.94i/50.00i, 720/59.94p/50.00p, 480/59.94p, 576/50.00p |

Audio Input

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|----------------------|--|
| Built-in Microphone: | Stereo microphone |
| XLR Input: | XLR (3-pin) x 2 (INPUT1, INPUT2) Input high impedance, LINE/MIC/MIC+48V (switchable SW) LINE: +4 dBu/0 dBu (switchable menu) MIC: -40 dBu/-50 dBu/-60 dBu (switchable menu) |

Audio Output

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| SDI: | 2 ch (LPCM) switchable gain: 0 dB/-6 dB/-12 dB |
| HDMI: | 2 ch (LPCM) |
| AUDIO OUT: | AV connector x 1, Output level: 600 Ω, 251 mV |
| Headphone: | 3.5 mm diameter stereo mini jack x 1 |
| Speaker: | 20 mm diameter, round x 1 |

Other Input/Output

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|-------------------|---|
| Camera Remote: | 2.5 mm diameter super mini jack x1 (ZOOM, S/S) 3.5 mm diameter mini jack x1 (FOCUS, IRIS) |
| TC PRESET IN/OUT: | BNC x 1, Used as the input and output terminals Input: 1.0 V to 4.0 V [p-p] 10 KΩ Output: 2.0 V ± 0.5 V [p-p] low impedance |
| USB 3.0 HOST: | Standard-A connector, 9-pin, external media device connection ^{*4} , bus power supported |
| USB 3.0 DEVICE: | Micro-B connector, 10-pin, Mass storage function (read only) |
| DC IN 12V: | DC 12V (11.4V to 12.6V) EIAJ Type4 |

Monitor/Viewfinder

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|--------------|---|
| LCD Monitor: | 3.5 type LCD color monitor, Approx. 1,150,000 dots |
| Viewfinder: | 0.39 type OLED (organic EL display) Approx. 2,360,000 dots, video display area: approx. 1,770,000 dots |

Included Accessories

Battery (AG-VBR59), Battery charger (AG-BRD50), AC adaptor, Microphone holder kit, AC cable, Eye cup, Lens hood, INPUT terminal cap, Operating instructions

*1: An SD memory card with a capacity of UHS Speed Class 3 (U3) is required to shoot videos with a bit rate of 100 Mbps or higher. An SDXC memory card with a capacity of 64 GB or more and UHS Speed Class 3 (U3) is required to shoot UHD 2160/59.94p/50.00p videos with a bit rate of 150 Mbps or higher.

*2: It supports in record mode less than 50 Mbps.

*3: Output of UHD/59.94p/50.00p becomes 8 bit 4:2:0.

*4: External media devices with a capacity of below 32 GB or a capacity above 2 TB cannot be used.