

TYPE

Type	Digital Single Lens Mirrorless camera
Recording media	SD Memory Card / SDHC Memory Card* / SDXC Memory Card* *Compatible with UHS-I/UHS-II UHS Speed Class 3 standard SDHC/SDXC Memory Cards and UHS-II Video Speed Class 90 standard SDXC Memory Cards.
Lens mount	L-Mount

IMAGESENSOR

Type	35mm full-frame (35.6mm x 23.8mm) CMOS sensor
Camera effective pixels / Total pixels	24.20 megapixels / 25.28 megapixels
Aspect ratio / Color filter	3:2 / Primary color filter
Dust reduction system	Supersonic wave filter

LATITUDE

LATITUDE	14+ stops (V-Log)
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Recordingfileformat

Still image	JPEG (DCF, Exif 2.31), RAW, HLG Photo (CTA-2072)
6K PHOTO*** / 4K PHOTO***	6K PHOTO: MP4 (H.265/HEVC, Audio format: AAC (2ch)) 4K PHOTO: MP4 (H.264/MPEG-4 AVC, Audio format: AAC (2ch)) Extracted still images: JPEG (DCF, Exif 2.31)

Aspectratio

Aspect ratio	4:3 / 3:2 / 16:9 / 1:1 / 65:24 / 2:1
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Filesize(Pixels)

When using full-frame lenses, 3:2	6000x4000(L) / 4272x2848(M) / 3024x2016(S) / 12000x8000(XL)* *High Resolution Mode. RAW file. 5184x3456(6K PHOTO) / 3504x2336(4K PHOTO) / 5984x4000(HLG PHOTO, Full-Res.) / 3232x2160(HLG PHOTO, 4K-Res.)
When using full-frame lenses, 4:3	5328x4000(L) / 3792x2848(M) / 2688x2016(S) / 10656x8000(XL)* *High Resolution Mode. RAW file. 4992x3744(6K PHOTO) / 3328x2496(4K PHOTO) / 5312x3984(HLG PHOTO, Full-Res.) / 2880x2160(HLG PHOTO, 4K-Res.)
When using full-frame lenses, 16:9	6000x3368(L) / 4272x2400(M) / 3024x1704(S) / 12000x6736(XL)* *High Resolution Mode. RAW file. 3840x2160(4K PHOTO) / 5888x3312(HLG PHOTO, Full-Res.) / 3840x2160(HLG PHOTO, 4K-Res.)
When using full-frame lenses, 1:1	4000x4000(L) / 2848x2848(M) / 2016x2016(S) / 8000x8000(XL)* *High Resolution Mode. RAW file. 2880x2880(4K PHOTO) /

4000x4000(HLG PHOTO, Full-Res.) / 2144x2144(HLG PHOTO, 4K-Res.)

When using full-frame lenses, 65:24	6000x2208(L)
When using full-frame lenses, 2:1	6000x3000(L)
When using Super 35mm (APS-C) lenses, 3:2	3888x2592(L) / 2784x1856(M) / 1968x1312(S) / 3504x2336(4K PHOTO)
When using Super 35mm (APS-C) lenses, 4:3	3536x2656(L) / 2560x1920(M) / 1840x1376(S) / 3328x2496(4K PHOTO)
When using Super 35mm (APS-C) lenses, 16:9	4064x2288(L) / 2816x1584(M) / 1920x1080(S) / 3840x2160(4K PHOTO)
When using Super 35mm (APS-C) lenses, 1:1	2656x2656(L) / 1920x1920(M) / 1376x1376(S) / 2880x2880(4K PHOTO)
Image quality	RAW / RAW+Fine / RAW+Standard / Fine / Standard
Color space	sRGB, AdobeRGB

MOTIONPICTURE

Recording file format	MOV: H.264/MPEG-4 AVC, H.265/HEVC (Audio format: LPCM (2ch 48kHz/16-bit, 48kHz/24-bit*, 96kHz/24-bit*)) *When attaching DMW-XLR1 (sold separately). MP4: H.264/MPEG-4 AVC, H.265/HEVC (Audio format: AAC (2ch)) AVCHD Progressive, AVCHD (Audio format: Dolby Audio (2ch))
System frequency	59.94Hz / 50.00Hz / 24.00Hz

MP4

59.94Hz Full-frame	[4K] 3840x2160 29.97p, 72Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 23.98p, 72Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 29.97p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [4K] 3840x2160 23.98p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 59.94p, 28Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 29.97p, 20Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 23.98p, 24Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC)
59.94Hz Super 35mm / Pixel by Pixel	[4K] 3840x2160 59.94p, 100Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 29.97p, 72Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 23.98p, 72Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 29.97p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [4K] 3840x2160 23.98p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 59.94p, 28Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 29.97p, 20Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 23.98p, 24Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC)

50.00Hz Full-frame [4K] 3840x2160 25.00p, 72Mbps (4:2:0 10-bit LongGOP)(H.265/HEVC, AAC) [4K] 3840x2160 25.00p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 50.00p, 28Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 25.00p, 20Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC)

50.00Hz Super 35mm / Pixel by Pixel [4K] 3840x2160 50.00p, 100Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 25.00p, 72Mbps (4:2:0 10-bit LongGOP) (H.265/HEVC, AAC) [4K] 3840x2160 25.00p, 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 50.00p, 28Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC) [FHD] 1920x1080 25.00p, 20Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, AAC)

24.00Hz Full-frame / Super 35mm / Pixel - by Pixel

AVCHD Progressive AVCHD

59.94Hz Full-frame / Super 35mm / Pixel by Pixel [FHD] 1920x1080 59.94p (Sensor output is 59.94fps), 28Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 59.94i (Sensor output is 59.94fps), 17Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 59.94i (Sensor output is 29.97fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 23.98p (Sensor output is 23.98fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby)

50.00Hz Full-frame / Super 35mm / Pixel by Pixel [FHD] 1920x1080 50.00p (Sensor output is 50.00fps), 28Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 50.00i (Sensor output is 50.00fps), 17Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 50.00i (Sensor output is 25.00fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby)

24.00Hz Full-frame / Super 35mm / Pixel - by Pixel

Continuous recordable time

Continuous recordable time (Motion picture)*** AVCHD [FHD/60p]: Approx. 160 min (Full-frame), 140 min (Super 35mm), 150 min (Pixel by Pixel) *When using S-R24105. When the battery is fully charged. MP4 [4K/60p]: Approx. 120 min (Super 35mm, Pixel by Pixel) *When using S-R24105. When the battery is fully charged. MOV [C4K/24p/4:2:2 10-bit/ALL-Intra]: Approx. 130 min (Full-frame, Super 35mm, Pixel by Pixel) *When using S-R24105. When the battery is fully charged.

Actual recordable time

Actual recordable time (Motion picture)*** AVCHD [FHD/60p]: Approx. 80 min (Full-frame), 70 min (Super 35mm), 75 min (Pixel by Pixel) *When using S-R24105. When the battery is fully charged. MP4 [4K/60p]: Approx. 60 min (Super 35mm, Pixel by Pixel) *When using S-R24105. When the battery is fully charged. MOV [C4K/24p/4:2:2 10-bit/ALL-Intra]: Approx. 65 min (Full-frame, Super 35mm, Pixel by Pixel) *When using S-R24105. When the battery is fully charged.

MOV

59.94Hz Full-frame [FHD] 1920x1080 59.94p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)* [FHD] 1920x1080 29.97p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*

[FHD] 1920x1080 23.98p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

59.94Hz Super 35mm
[C4K] 4096x2160 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)
[C4K] 4096x2160 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (LPCM) [4K] 3840x2160 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (LPCM)
[Anamorphic 4K] 3328x2496 (4:3) 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [FHD] 1920x1080 59.94p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)* [FHD] 1920x1080 29.97p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)* [FHD] 23.98p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)* *Angle of view narrows if you select a frame rate with a number of frames 151 or more.

59.94Hz Pixel by Pixel
[C4K] 4096x2160 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)
[C4K] 4096x2160 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 29.97p (Maximum output of sensor is 50fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 23.98p (Maximum output of sensor is 48fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [FHD] 1920x1080 29.97p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [FHD] 1920x1080 23.98p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)

50.00Hz Full-frame
[FHD] 1920x1080 50.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
[FHD] 1920x1080 25.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

50.00Hz Super 35mm
[C4K] 4096x2160 25.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 25.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 25.00p (Maximum output of sensor is 50fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)
[FHD] 1920x1080 50.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
[FHD] 1920x1080 25.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

50.00Hz Pixel by Pixel
[C4K] 4096x2160 25.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 25.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 25.00p (Maximum output of sensor is 50fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)

[FHD] 1920x1080 24.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

24.00Hz Full-frame [FHD] 1920x1080 24.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

24.00Hz Super 35mm [C4K] 4096x2160 24.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 24.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3)24.00p (Maximum output of sensor is 48fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [FHD] 1920x1080 24.00p (Maximum output of sensor is 180fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)*
*Angle of view narrows if you select a frame rate with a number of frames 151 or more.

24.00Hz Pixel by Pixel [C4K] 4096x2160 24.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [4K] 3840x2160 24.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [Anamorphic 4K] 3328x2496 (4:3) 24.00p (Maximum output of sensor is 48fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM) [FHD] 1920x1080 24.00p (Maximum output of sensor is 60fps), 100Mbps (4:2:0 8-bit LongGOP) (H.264/MPEG-4 AVC, LPCM)

AVCHDProgressiveAVCHD

59.94Hz Full-frame / Super 35mm / Pixel by Pixel [FHD] 1920x1080 59.94i (Maximum output of sensor is 60fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby) [FHD] 1920x1080 23.98p (Maximum output of sensor is 60fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby)

50.00Hz Full-frame / Super 35mm / Pixel by Pixel [FHD] 1920x1080 50.00i (Maximum output of sensor is 60fps), 24Mbps (4:2:0 8-bit LongGOP) (Dolby)

VIEWFINDER

Type	OLED Live View Finder
Pixels	Approx. 5.76 million dots
Field of view / Magnification	Approx. 100% / Approx. 0.78x with 50 mm lens at infinity; -1.0 m-1, when the aspect ratio is set to 3:2
Eye point / Diopter adjustment	Approx. 21 mm at infinity; -1.0 m-1 / -4.0 - +2.0 (dpt)
Eye sensor	Yes
Display speed	120fps / 60fps
Display time lag	Approx. 0.005sec

REARMONITOR

Type	TFT LCD monitor with static touch control
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Monitor size	Tilt free-angle, 3.2-inch (8.0cm), 3:2 aspect
Pixels	Approx. 2.33 million dots
Field of view	Approx. 100%

STATUSLCD

STATUS LCD	1.8-inch, 303 x 230 dots (effective pixels 287 x 214 dots), Monochrome LCD monitor
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FOCUS

Type	Contrast AF system
DFD technology	Yes
Focus mode	AFS (Single) / AFC (Continuous) / MF
AF mode	Auto Detection (Face, Eye, Body, Animal) / Tracking / 225-Area / Zone (Vertical/Horizontal) / Zone (Square) / Zone (Oval) / 1-Area+ / 1-Area / Pinpoint / Custom 1, 2, 3 (Full area touch is available) (Scalable AF frame size and flexible AF position)
AF detectable range	EV -6 - 20 (F1.4, ISO100 equivalent, AFS)
AF custom setting	AF Sensitivity, AF Area Switching Sensitivity, Moving Object Prediction
AF assist lamp	Yes
AF lock	Set the Fn button in custom menu to AF lock
Post Focus / Focus Stacking	Yes / Yes
Others	AF-ON, Shutter AF, Half Press Release, Focus/Shutter Priority, Quick AF, Continuous AF (during motion picture recording), Eye Sensor AF, AF-Point Scope Setting, AF+MF, MF Guide, MF Assist, Touch MF Assist, Focus Peaking, Touch AF/AE Function, Touch Pad AF, Touch Shutter, Focus Switching for Vert/Hor, Focus Ring Lock, Show/Hide AF Mode, 1-Area AF Moving Speed, Loop Movement Focus Frame, AFC Start Point (225-Area), Lens Focus Resume, Focus Ring Control

EXPOSURECONTROL

Light metering system	1,728-zone multi-pattern sensing system
Light metering mode	Multiple / Center Weighted / Spot / Highlight Weighted
Metering range	EV0-18 (F2.0 lens, ISO100 equivalent)
Exposure mode	Program AE / Aperture Priority AE / Shutter Priority AE / Manual Exposure
ISO sensitivity (Standard output sensitivity)	Auto / 50* / 100 / 200 / 400 / 800 / 1600 / 3200 / 6400 / 12800 / 25600 / 51200 / 102400* / 204800* (Changeable to 1/3 EV step) *Extended ISO

Dual Native ISO [Normal] Native ISO: 100, 640 Auto: Auto / 50* / 100-51200 / 102400* / 204800* *Extended ISO Low: Auto / 50* / 100-800 *Extended ISO High: Auto / 320* / 640-51200 / 102400* / 204800* *Extended ISO [V-Log] Native ISO: 640, 4000 Auto: Auto / 320* / 640-51200 *Extended ISO Low: Auto / 320* / 640-5000 *Extended ISO High: Auto / 2000* / 4000-51200 *Extended ISO [HLG] Native ISO: 400, 2500 Auto: Auto / 400-51200 / 102400* / 204800* *Extended ISO Low: Auto / 400-3200 High: Auto / 2500-51200 / 102400* / 204800* *Extended ISO [Cinelike D2 / Cinelike V2] Native ISO: 200, 1250 Auto: Auto / 100* / 200-51200 / 102400* / 204800* *Extended ISO Low: Auto / 100* / 200-1600 *Extended ISO High: Auto / 640* / 1250-51200 / 102400* / 204800* *Extended ISO

Exposure compensation	1/3 EV step ±5EV (±3EV for motion picture)
AE lock	Set the Fn button in custom menu to AE lock

IMAGESTABILIZATIONSYSTEM

IMAGE STABILIZATION SYSTEM Image sensor shift type (5-axis / 6.0-stop*) *Based on the CIPA standard [Yaw/Pitch direction: focusing distance f=50mm when S-X50 is used.] Dual I.S. (6.5-stop* Dual I.S. 2 compatible) *Based on the CIPA standard [Yaw/Pitch direction: focusing distance f=105mm when S-R24105** is used. focusing distance f=200mm when S-R70200** is used.] **Firmware must be updated to the latest version.

WHITEBALANCE

White balance	AWB / AWBc / AWBw / Daylight / Cloudy / Shade / Incandescent / Flash / White Set 1, 2, 3, 4 / Color temperature setting 1, 2, 3, 4
White balance adjustment	Blue/Amber bias, Magenta/Green bias
Color temperature setting	2500-10000K in 100K

SHUTTER

Type	Focal-plane shutter
Shutter speed	Still image: Bulb (Max. 30 minutes), 1/8,000 - 60 Electronic front curtain shutter: Bulb (Max. 30 minutes), 1/2,000 - 60 Electronic shutter: Bulb (Max. 60 sec), 1/8,000 - 60 Motion picture: 1/16,000 - 1/25 (When using Synchro Scan) Creative Video M mode / MF mode: 1/16,000 - 1/2
Shutter life	Approx. 400,000 images
Self timer	10sec, 3 images / 2sec / 10sec
Remote control	Remote control by DMW-RS2 (sold separately)
Silent mode / Shutter type	Yes / Yes (Auto / Mechanical / Electronic front curtain / Electronic / Electronic+NR)

BRACKET

AE bracket	3, 5, 7 images in 1/3, 2/3 or 1 EV step, max. ±3 EV, single/burst
Aperture bracket	3, 5 or all positions in 1 EV step

Focus bracket	1 to 999 images, focus steps can be set in 10 levels
White balance bracket	3 images in blue/amber axis or in magenta/green axis, color temperature setting

Burstspeed

Mechanical shutter / Electronic front curtain shutter	AFS/MF: H: 9 frames/sec, M: 5 frames/sec (with Live View), L: 2 frames/sec (with Live View) AFC: H: 6 frames/sec (with Live View), M: 5 frames/sec (with Live View), L: 2 frames/sec (with Live View)
Electronic shutter	AFS/MF: H: 9 frames/sec, M: 5 frames/sec (with Live View), L: 2 frames/sec (with Live View) AFC: H: 5 frames/sec (with Live View), M: 5 frames/sec (with Live View), L: 2 frames/sec (with Live View)
Number of recordable images	RAW / RAW+JPEG: More than 60 images JPEG: More than 999 images (When using a card with SD Speed Class with "UHS-II UHS Speed Class 3 (U3)".) * Until the burst shooting speed slows. When recording is performed under the test conditions specified by Panasonic.

6KPHOTO4KPHOTO

Burst speed	6K PHOTO: 30 frames/sec 4K PHOTO: 60 frames/sec, 30 frames/sec
Exif information	Yes (Each JPEG image cropped out of the 6K/4K burst file complies with EXIF.)

FLASH

Flash type	TTL External Flash (sold separately)
Flash mode	Auto* / Auto/Red-eye Reduction* / Forced On / Forced On/Red-eye Reduction / Slow Sync. / Slow Sync./Red-eye Reduction / Forced Off *For iA only.
Flash synchronization	1st Curtain Sync, 2nd Curtain Sync.
Flash output adjustment	1/3EV step ±3EV
Synchronization speed	Less than 1/320 second *The guide number decreases at 1/320 second. Only when set to M mode or S mode.
Wireless control	Yes (When using DMW-FL200L / FL360L / FL580L (sold separately)), Wireless Channel: 1ch/2ch/3ch/4ch
Flash sync socket	Yes

EXTRATELECONVERSION

EXTRA TELE CONVERSION	2.0x (EX S) (When using full-frame lenses), 1.9x (EX S) (When using Super 35mm (APS-C) lenses), 1.4x (EX M) *Only for still image recording.
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PHOTOSTYLE

Photo Style	Standard / Vivid / Natural / Flat / Landscape / Portrait / Monochrome / L. Monochrome / L. Monochrome D / Cinelike D2 / Cinelike V2 /
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Like709 / V-Log / Standard (HLG) / Monochrome (HLG) / Like2100 / My Photo Style 1-10

Picture adjustment	Contrast / Highlight / Shadow / Saturation / Color Tone / Hue / Filter Effect / Grain Effect / Sharpness / Noise Reduction / Dual Native ISO Setting / ISO / WB *Adjustable settings vary depending on the Photo Style mode.
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FILTER

FILTER	Expressive / Retro / Old Days / High Key / Low Key / Sepia / Monochrome / Dynamic Monochrome / Rough Monochrome* / Silky Monochrome* / Impressive Art / High Dynamic / Cross Process / Toy Effect / Toy Pop / Bleach Bypass / Miniature Effect / Soft Focus* / Fantasy / Star Filter* / One Point Color / Sunshine* *For photos only.
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MOTIONPICTUREFUNCTION

Master pedestal level	31 steps
Luminance level	8-bit: 0-255 / 16-235 / 16-255 10-bit: 0-1023 / 64-940 / 64-1023
Wave form monitor / Vectorscope	Selectable
LUT display	LUT View Assist (Monitor) / LUT View Assist (HDMI)
Synchro scan	Yes
Time code	Count Up: Rec Run/Free Run selectable, Time Code Mode: Drop frame/Non-drop frame selectable (When system frequency [59.94Hz] is selected.)
SS/Gain operation	Shutter Duration/ISO / Angle/ISO / Shutter Duration/dB
Color bars / 1kHz test tone	Yes (SMPTE / EBU / ARIB) / Yes
Knee control	Yes (in Like709 mode)

FUNCTIONBUTTON

REC	Exposure Comp. / Dual Native ISO Setting / Sensitivity / White Balance / Photo Style / Metering Mode / Aspect Ratio / Picture Quality / Picture Size / HLG Photo / High Resolution Mode / 1 Shot Spot Metering / Long Exposure NR / Min. Shutter Speed / 1 Shot RAW+JPG / i.Dynamic Range / Filter Effect / One Push AE / Touch AE / Exposure Mode / Synchro Scan / AF Mode / AF Custom Setting(Photo) / AF Custom Setting(Video) / Focus Peaking / Focus Peaking Sensitivity / 1-Area AF Moving Speed / Focus Ring Lock / AE LOCK / AF LOCK / AF/AE LOCK / AF-ON / AF-ON: Near Shift / AF-ON: Far Shift / AF-Point Scope / Focus Area Set / Flash Mode / Flash Adjust. / Wireless Flash Setup / Drive Mode / 1 Shot "6K/4K PHOTO" / Bracketing / Silent Mode / Image Stabilizer / Shutter Type / Ex. Tele Conv. / Flicker Decrease (Photo) / Post-Focus / Motion Pic. Rec Format / Motion Pic. Rec Quality / Rec Quality (My List) / Variable Frame Rate / Time Code Display / Sound Rec Level Disp. / Mute Sound Input / Sound Rec Level Adj. / Sound Rec Level Limiter / XLR Mic Adaptor Setting / Mic. Directivity Adjust / Image Stabilizer / E-Stabilization (Video) / Boost I.S. (Video) / Image Area of Video / Focus Transition / Live Cropping / Q.MENU / Rec / Playback Switch / Video Record / LVF/Monitor Switch / LVF Magnification / Dial
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Operation Switch / Preview / Constant Preview / Level Gauge / Histogram / Luminance Spot Meter / Video Frame Marker / Photo Grid Line / Live View Boost / Monochrome Live View / Night Mode / LVF/Monitor Disp. Style / Video-Priority Display / Status-LCD Display (Video) / Zebra Pattern / LUT View Assist (Monitor) / LUT View Assist (HDMI) / LUT Select / HLG View Assist(Monitor) / HLG View Assist (HDMI) / Sheer Overlay / I.S. Status Scope / WFM/Vector Scope / Anamorphic Desqueeze Display / Color Bars / Focus Ring Control/ Zoom Control / Destination Card Slot / Wi-Fi / Fan Mode / No Setting / Restore to Default

PLAY

Magnify from AF Point / LUT View Assist (Monitor) / HLG View Assist (Monitor) / Anamorphic Desqueeze Display / RAW Processing / 6K/4K PHOTO Bulk Saving / Delete Single / Protect / Rating 1, 2, 3, 4, 5 / Copy / Rec/Playback Switch / LVF/Monitor Switch / Video Record / Night Mode / Card Slot Change / Wi-Fi / Fan Mode / Send Image (Smartphone) / LUT View Assist (HDMI) / HLG View Assist (HDMI) / 6K/4K Photo Play / No Setting / Restore to Default

LEVELGAUGE

LEVEL GAUGE Yes

OSDLANGUAGE

OSD LANGUAGE Japanese, English, German, French, Italian, Spanish, Polish, Czech, Hungarian, Romanian, Netherlandic, Turkish, Portuguese, Finnish, Danish, Swedish, Greek

PRINT

PRINT PictBridge compatible

INTERFACE

USB SuperSpeed USB 3.1 Gen1 Type-C

HDMI

Monitor-through 4:2:2 10bit (When [Rec Quality] is set to [4:2:2 10bit] or [4:2:0 10bit].) 4:2:2 8bit (When [Rec Quality] is set to [4:2:0 8bit].) Info Display: ON / OFF (selectable) Down Convert: Auto / 4K/30p/25p / 1080p / 1080i / OFF HLG View Assist (HDMI): AUTO / MODE1 / MODE2 / OFF (selectable)

Playback HDMI TypeA / VIERA Link, Audio: Stereo 59.94Hz: Auto / C4K/60p / C4K/30p / 4K/60p / 4K/30p / 1080p / 1080i / 720p / 480p 50.00Hz: Auto / C4K/50p / C4K/25p / 4K/50p / 4K/25p / 1080p / 1080i / 720p / 576p 24.00Hz: Auto / C4K/24p / 4K/24p / 1080p

Remote input ϕ 2.5mm

External microphone / external audio device input ϕ 3.5mm for external microphone / external audio device MIC (Plug-in Power) / MIC / LINE is selectable. Stereo/Lens Auto/Shotgun/Super Shotgun/Manual is selectable when attaching DMW-MS2 (sold separately).

Headphone output ϕ 3.5mm

Microphone Stereo, Wind Noise Cancellor: OFF / Low* / Standard / High *When attaching DMW-MS2 (sold separately).

XLR microphone	Yes with DMW-XLR1 (sold separately)
Speaker	Monaural
SD card slot	Slot 1, Slot 2
TC IN/OUT	Yes with BNC Converter Cable (bundled)
Fan	Auto1 / Auto2 / Normal / Slow
Tally lamp	Yes (front/rear)

WIRELESS

Wi-Fi	2.4GHz (STA/AP) (IEEE802.11b/g/n) 5GHz (STA) (IEEE 802.11a/n/ac) *5GHz Wi-Fi is not available in some countries. 1-13, 36, 40, 44, 48, 52, 56, 60, 64, 100, 104, 108, 112, 116, 120, 124, 128, 132, 136, 140 ch
Bluetooth	Bluetooth® v4.2 (Bluetooth Low Energy (BLE))

DUST AND SPLASH RESISTANT

DUST AND SPLASH RESISTANT*	Yes. *Dust and Splash Resistant does not guarantee that damage will not occur if this camera is subjected to direct contact with dust and water.
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POWER

Battery	Li-ion Battery Pack (7.4V, 3050mAh, 23Wh) (bundled) USB power supply, USB power charging
Battery life (CIPA standard)	Approx. 400 images (rear monitor), 380 images (LVF), 1,150 images (Power Save LVF mode*) with S-R24105 *Under the test conditions specified by Panasonic based on CIPA standard. When the time to get in the sleep mode is set to 1 sec.
Battery grip	DMW-BGS1 (sold separately)

DIMENSIONS WEIGHT

Dimensions (W x H x D)	Approx. 151.0 x 114.2 x 110.4 mm / 5.94 x 4.50 x 4.35 inch (excluding protrusions)
Weight	Approx. 1,164g / 2.57 lb (SD Memory Card x 1, Battery, Body) Approx. 1,052g / 2.32 lb (Body only)

OPERATING ENVIRONMENT

Operating temperature*****	-10oC to 40oC (14oF to 104oF)
Operating humidity	10%RH to 80%RH