

Product Specifications

Specifications

Lens	LENS MOUNT E-mount	LENS COMPATIBILITY Sony E-mount lenses
Sensor	SENSOR TYPE 35 mm	NUMBER OF PIXELS (TOTAL) Approx.12.4 MP
	SENSOR 35 mm full frame (35.6 x 23.8 mm), Exmor® CMOS sensor	IMAGE SENSOR ASPECT RATIO 3 : 2
	NUMBER OF PIXELS (EFFECTIVE) Approx.12.2 MP	ANTI-DUST SYSTEM Charge protection coating on optical filter and image sensor shift mechanism
Recording (still images)	RECORDING FORMAT (STILL IMAGES) JPEG (DCF Ver. 2.0, Exif ver. 2.3, MPF baseline compliant), RAW (Sony ARW 2.3 format)	UNCOMPRESSED RAW Yes
	IMAGE SIZE (PIXELS), 3:2 35 mm full frame L: 4240 x 2832 (12M), M: 2768 x 1848 (5.1M), S: 2128 x 1416 (3.0M), APS-C L: 2768 x 1848 (5.1M), M: 2128 x 1416 (3.0M), S: 1376 x 920 (1.3M)	PICTURE EFFECT 13 modes: Posterization (Color, B/W), Pop Color, Retro Photo, Partial Color (R, G, B, Y), High Contrast Monochrome, Toy Camera, Soft High-key, Soft Focus, HDR Painting, Rich-tone Monochrome, Miniature, Watercolor, Illustration
	IMAGE SIZE (PIXELS), 16:9 35 mm full frame L: 4240 x 2384 (10M), M: 2768 x 1560 (4.3M), S: 2128 x 1200 (2.6M), APS-C L: 2768 x 1560 (4.3M), M: 2128 x 1200 (2.6M), S: 1376 x 776 (1.1M)	CREATIVE STYLE Standard, Vivid, Neutral, Clear, Deep, Light, Portrait, Landscape, Sunset, Night Scene, Autumn Leaves, Black & White, Sepia (Contrast -3 to +3 steps, Saturation -3 to +3 steps, Sharpness -3 to +3 steps) (Style Box 1–6 also provided)
	IMAGE SIZE (PIXELS), SWEEP PANORAMA Wide: Horizontal 12416 x 1856 (23M), vertical 5536 x 2160 (12M), Standard: Horizontal 8192 x 1856 (15M), vertical 3872 x 2160 (8.4M)	DYNAMIC RANGE FUNCTIONS Off, Dynamic Range Optimizer (Auto/Level (1-5)), Auto High Dynamic Range: Auto Exposure Difference, Exposure Difference Level (1.0-6.0 EV, 1.0 EV step)
	IMAGE QUALITY MODES RAW, RAW & JPEG, JPEG Extra fine, JPEG Fine, JPEG Standard	COLOR SPACE sRGB standard (with sYCC gamut) and Adobe® RGB standard compatible with TRILUMINOS Color
	RAW OUTPUT 14 bit	

Recording (movie)

RECORDING FORMAT

XAVC S/AVCHD format Ver. 2.0 compliant/MP4

VIDEO COMPRESSION

XAVC S: MPEG-4 AVC/H.264; AVCHD: MPEG-4 AVC/H.264;
MP4: MPEG-4 AVC/H.264

AUDIO RECORDING FORMAT

AVCHD: Dolby® Digital (AC-3), 2ch, Dolby® Digital Stereo
Creator, MP4: MPEG-4 AAC-LC, 2ch, XAVC S: LPCM, 2ch

IMAGE SIZE (PIXELS), NTSC

XAVC S 4K: 3840 x 2160 (30p/100 Mbps, 30p/60 Mbps,
24p/100 Mbps, 24p/60 Mbps); XAVC S HD: 1920 x 1080
(60p/50 Mbps, 30p/50 Mbps, 24p/50 Mbps, 120p/100 Mbps,
120p/60 Mbps); AVCHD: 1920 x 1080 (60p/28 Mbps/PS,
60i/24 Mbps/FX, 60i/17 Mbps/FH, 24p/24 Mbps/FX, 24p/17
Mbps/FH); MP4: 1920 x 1080 (60p/28 Mbps, 30p/16 Mbps),
1280 x 720 (30p/6 Mbps)

IMAGE SIZE (PIXELS), PAL

XAVC S 4K: 3840 x 2160 (25p/100 Mbps, 25p/60 Mbps); XAVC
S HD: 1920 x 1080 (50p/50 Mbps, 25p/50 Mbps, 100p/100
Mbps, 100p/60 Mbps); AVCHD: 1920 x 1080 (50p/28
Mbps/PS, 50i/24 Mbps/FX, 50i/17 Mbps/FH,25p/24 Mbps/FX,
25p/17 Mbps/FH); MP4: 1920 x 1080 (50p/28 Mbps, 25p/16
Mbps), 1280 x 720 (25p/6 Mbps)

HIGH FRAME RATE RECORDING

NTSC: 1920 x 1080 (24p/12 Mbps, 30p/16 Mbps), PAL: 1920 x
1080 (25p/16 Mbps)

PICTURE PROFILE

Yes (Off / PP1-PP9) Parameters: Black level, Gamma (Movie,
Still, Cine1-4, ITU709, ITU709 [800%], S-Log2, S-Log3), Black
Gamma, Knee, Color Mode (Movie, Still, Cinema, Pro, ITU709
Matrix, White&Black, S-Gamut, S-Gamut3.Cine, S-Gamut3),
Saturation, Color Phase, Color Depth, Detail, Copy, Reset

MOVIE FUNCTIONS

Audio Level Display, Audio Rec Level, Auto Slow Shutter,
HDMI info. Display (On/Off selectable), Time Code/User Bit,
Picture Profile, Creative Style, Picture Effect, Rec Control, Dual
Video Rec, Marker Setting, PAL/NTSC Selector,Gamma
Display Assist

COLOR SPACE

xvYCC standard (x.v.Color when connected via HDMI cable)
compatible with TRILUMINOS Color

Storage Media

COMPATIBLE RECORDING MEDIA

Memory Stick PRO Duo™, Memory Stick PRO-HG Duo™,
Memory Stick Micro™ (M2), SD memory card, SDHC memory
card (UHS-I compliant), SDXC memory card (UHS-I compliant),
microSD memory card, microSDHC memory card, microSDXC
memory card

STORAGE MEDIA SLOT

Multi slot for Memory Stick Duo™ / SD memory card

Noise reduction

NOISE REDUCTION

Long exposure NR: On/Off, available at shutter speeds
longer than 1 sec., High ISO NR: Normal/Low/Off selectable

MULTI FRAME NR

Auto/ISO 100 to 409600

White Balance

WHITE BALANCE MODES

Auto WB / Daylight / Shade / Cloudy / Incandescent /
Fluorescent (Warm White / Cool White / Day White /
Daylight) / Flash / Color Temperature (2500 to 9900K) &
Color Filter (G7 to M7: 57 steps, A7 to B7: 29 steps) / Custom /
Underwater

AWB MICRO ADJUSTMENT

BRACKETING

3 frames, H/L selectable

Focus

FOCUS TYPE

Contrast-detection AF

FOCUS POINT

169 points (contrast-detection AF)

FOCUS SENSITIVITY RANGE

EV -4 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)

AF MODE

Single-shot AF (AF-S), Continuous AF (AF-C), Direct Manual Focus (DMF), Manual Focus

FOCUS AREA

Wide (169 points for contrast-detection AF) / Center / Flexible Spot (S/M/L) / Zone / Expand Flexible Spot / Lock-on AF (Wide / Zone / Center / Flexible Spot (S/M/L) / Expand Flexible Spot)

OTHER FEATURES

Lock-on AF, Eye AF, Focus lock; Eye-Start AF and AF micro adjustment (both only available with optional LA-EA2 or LA-EA4 attached), AF illuminator (built-in, LED type, range: Approx. 0.98-9.8 ft), AF ON

Exposure

METERING TYPE

1200-zone evaluative metering

METERING SENSOR

Exmor® CMOS sensor

METERING SENSITIVITY

EV -3 to EV 20 (at ISO 100 equivalent with F2.0 lens attached)

METERING MODE

Multi-segment, Center-weighted, Spot

EXPOSURE MODES

AUTO (iAUTO, Superior Auto), Programmed AE (P), Aperture priority (A), Shutter-speed priority (S), Manual (M), Scene Selection, Sweep Panorama, Movie / High Frame Rate (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M))

SCENE SELECTION

Portrait, Landscape, Macro, Sports Action, Sunset, Night Portrait, Night Scene, Handheld Twilight, Anti Motion Blur

EXPOSURE COMPENSATION

+/-5.0 EV (in 1/3 EV or 1/2 EV steps), with exposure compensation dial: +/-3.0 EV (in 1/3 EV steps)

AUTO (AE) BRACKETING

Bracket: Single/Bracket: Cont., 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0 or 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3 or 1.0 EV increments.

AE LOCK

Available with AE lock button. Locked when shutter button is pressed halfway. Can be disabled from the Menu.

ISO SENSITIVITY

Still images: ISO 100-102400 (expandable to ISO 50-409600), AUTO (ISO 100-12800, selectable lower limit and upper limit), Movies: ISO 100-102400 equivalent (expandable to ISO 100-409600 equivalent), AUTO (ISO 100-12800 equivalent, selectable lower limit and upper limit)

Viewfinder

VIEWFINDER TYPE

XGA OLED, 0.5" (1.3 cm) electronic viewfinder (color)

NUMBER OF DOTS

2,359,296 dots

MAGNIFICATION

Approx. 0.78x (with 50 mm lens at infinity, -1 mstyle name="sup"-1/style)

DIOPTRE ADJUSTMENT

	<p>BRIGHTNESS CONTROL (VIEWFINDER) Auto/Manual (5 steps between -2 and +2)</p> <p>COLOR TEMPERATURE CONTROL Manual (5 steps)</p> <p>FIELD COVERAGE 100%</p>	<p>-4.0 to +3.0 mstyle name="sup"-1/style</p> <p>EYE POINT Approx. 0.91" from the eyepiece lens, 0.73" from the eyepiece frame at -1mstyle name="sup"-1/style(CIPA standard)</p> <p>VIEWFINDER DISPLAY Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge</p> <p>REAL-TIME IMAGE ADJUSTMENT DISPLAY On/Off</p>
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LCD Screen

	<p>SCREEN TYPE 2.95 in (3.0 type) TFT drive</p> <p>TOTAL NUMBER OF DOTS 1,228,800 dots</p> <p>BRIGHTNESS CONTROL (LCD) Manual (5 steps between -2 and +2), Sunny Weather mode</p> <p>ADJUSTABLE ANGLE Up approx. 107 degrees, down approx. 41 degrees</p> <p>DISPLAY SELECTER (FINDER/LCD) Auto/Manual</p>	<p>LCD DISPLAY Display Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge / Shooting information for viewfinder mode</p> <p>REAL-TIME IMAGE ADJUSTMENT DISPLAY (LCD) On/Off</p> <p>FOCUS MAGNIFIER 35 mm full frame: 4.2x, 8.3x, APS-C: 2.7x, 5.4x</p> <p>ZEBRA Yes (selectable level + range or lower limit as custom setting)</p> <p>PEAKING MF Yes (Level setting: High/Mid/Low/Off, Color: White/Red/Yellow)</p>
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Other Features

	<p>FACE DETECTION On/On (Regist. Faces)/Off, Face registration, Face selection (Max. number of detectable faces: 8)</p> <p>AUTO OBJECT FRAMING Yes</p> <p>CLEAR IMAGE ZOOM Still / Movie: Approx. 2x</p> <p>SMART ZOOM (STILL IMAGE) M: Approx. 1.5x, S: Approx. 2.0x</p> <p>DIGITAL ZOOM (STILL IMAGE) Approx. 4x</p>	<p>DIGITAL ZOOM (MOVIE) Approx. 4x</p> <p>PLAYMEMORIES CAMERA APPS™ Yes</p> <p>LENS COMPENSATION Peripheral shading, chromatic aberration, distortion</p> <p>ZOOM RING ROTATE Yes</p> <p>IMAGE PROCESSOR BIONZ X™</p>
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Shutter	<p>SHUTTER TYPE Electronically controlled, vertical-traverse, focal-plane type</p>	<p>ELECTRONIC FRONT CURTAIN SHUTTER Yes, On/Off</p>
	<p>SHUTTER SPEED Still images: 1/8000 to 30 sec., Bulb Movies: 1/8000 to 1/4 (1/3 step) NTSC: Up to 1/60 in AUTO mode (up to 1/30 in Auto Slow Shutter mode) PAL: Up to 1/50 in AUTO mode (up to 1/25 in Auto Slow Shutter mode)</p>	<p>SILENT SHOOTING Yes, On/Off</p>
	<p>FLASH SYNC. SPEED 1/250 sec.</p>	
Image Stabilization	<p>STEADYSHOT Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications)</p>	<p>COMPENSATION EFFECT 4.5 stops (Based on CIPA standard. Pitch/Yaw shake only. With Sonnar T* FE 55 mm F1.8 ZA lens mounted. Long exposure NR off)</p>
Flash	<p>FLASH CONTROL Pre-flash TTL</p>	<p>FLASH MODES Flash off, Autoflash, Fill-flash, Rear Sync., Slow Sync., Red-eye reduction (On/Off selectable), Hi-speed sync ², Wireless ²</p>
	<p>FLASH COMPENSATION +/-3.0 EV (switchable between 1/3 and 1/2 EV steps)</p>	<p>EXTERNAL FLASH COMPATIBILITY Sony α System Flash compatible with Multi Interface Shoe. Attach the shoe adaptor for flash compatible with Auto-lock Accessory Shoe.</p>
	<p>FLASH BRACKETING 3/5/9 frames selectable. With 3 or 5 frames, in 1/3, 1/2, 2/3, 1.0, 2.0, 3.0 EV increments, with 9 frames, in 1/3, 1/2, 2/3, 1.0 EV increments.</p>	<p>FE LEVEL LOCK Yes</p>
Drive	<p>DRIVE MODES Single shooting, Continuous shooting, Speed Priority Continuous shooting, Self-timer, Self-timer (Cont.), Bracketing (Cont., Single, White Balance, DRO)</p>	<p>SPEED (APPROX. MAX.) Speed Priority Continuous shooting: Max. 5fps, Continuous shooting: Max. 2.5fps ³</p>
	<p>SELF-TIMER 10 sec. delay/5 sec. delay/2 sec. delay/Continuous self-timer (3 frames after 10 sec. delay/5 frames after 10 sec. delay/3 frames after 5 sec. delay/5 frames after 5 sec. delay/3 frames after 2 sec. delay/5 frames after 2 sec. delay)/Bracketing self-timer (Off/2 sec. delay/5 sec. delay/10 sec. delay)</p>	<p>NO. OF RECORDABLE FRAMES (APPROX.) Speed Priority Continuous shooting: 64 frames (JPEG Extra Fine L), 200 frames (JPEG Fine L), 200 frames (JPEG Standard L), 31 frames (RAW), 26 frames (RAW & JPEG), 24 frames (RAW (Uncompressed)), 24 frames (RAW (Uncompressed) & JPEG) Continuous shooting: 100 frames (JPEG Extra Fine L), 200 frames (JPEG Fine L), 200 frames (JPEG Standard L), 59 frames (RAW), 34 frames (RAW & JPEG), 29 frames (RAW (Uncompressed)), 28 frames (RAW (Uncompressed) & JPEG)</p>

Playback

PLAYBACK MODES
Single (with or without shooting information, Y RGB histogram & highlight/shadow warning), 9/25-frame index view, Enlarged display mode (Maximum magnification L: 13.3x, M: 8.7x, S: 6.7x), Auto Review (10/5/2 sec, off), Image orientation (Auto/Manual/Off selectable), Slideshow, Panorama scrolling, Folder selection (Still / Date / MP4 / AVCHD / XAVC S HD / XAVC S 4K), Forward/Rewind (Movie), Delete, Protect

Interface

PC INTERFACE
Mass-storage, MTP, PC remote

MULTI / MICRO USB TERMINAL
Yes⁴

WIRELESS LAN (BUILT-IN)
Wi-Fi Compatible, IEEE802.11b/g/n (2.4 GHz band); ⁵
Playback of still images and movies on smartphones, PCs, and TVs

NFC™
Yes (NFC Forum Type 3 Tag compatible, One-touch remote, One-touch sharing)

HD OUTPUT
HDMI micro connector (Type-D), BRAVIA® Sync (link menu), Photo TV HD, 4K movie output, 4K still image playback

MULTI INTERFACE SHOE
Yes

OTHERS
Auto-lock Accessory Shoe compatible with supplied shoe adaptor, Microphone terminal (3.5 mm Stereo minijack), Headphone terminal (3.5 mm Stereo minijack), Vertical Grip Connector

Audio

MICROPHONE
Built-in stereo microphone or ECM-XYST1M / XLR-K2M (sold separately)

SPEAKER
Built-in, monaural

Print

COMPATIBLE STANDARDS
Exif Print, Print Image Matching III, DPOF setting

Custom function

CUSTOM FUNCTION TYPE
Custom key settings, Programmable setting

MEMORY FUNCTION
Yes (2 sets)

Power

SUPPLIED BATTERY
Rechargeable battery pack NP-FW50

BATTERY LIFE (CIPA, MOVIES)
Actual: Approx. 55 min. (viewfinder) / Approx. 60 min. (LCD)

	BATTERY LIFE (CIPA, STILL IMAGES) Approx. 310 shots (viewfinder) / Approx. 370 shots (LCD screen) (CIPA standard)	screen) (CIPA standard); Continuous: Approx. 95 min. (viewfinder) / Approx. 100 min. (LCD screen) (CIPA standard) EXTERNAL POWER AC adapter AC-PW20 (optional)
Size & Weight	DIMENSIONS (W X H X D) 4.69 x 2.74 x 1.50 in	WEIGHT 20.6 oz (Body Only) / 22.12 oz (With battery and Memory Stick PRO Duo™)
Others	OPERATING TEMPERATURE 32–104°F / 0–40°C	
WiFi® & NFC	WIRELESS & NETWORK CAPABILITIES NFC One-touch functionality	