

Main specifications **α6500**

General	
Camera type	Interchangeable-lens digital camera
Lens mount	E-mount
Image sensor	
Type	APS-C type (23.5 x 15.6mm) Exmor CMOS sensor
Number of pixels (effective)	Approx. 24.2 megapixels
Number of pixels (total)	Approx. 25.0 megapixels
Image sensor aspect ratio	3:2
Anti-dust system	Yes
Recording system (still images)	
Recording format	JPEG (DCF Ver. 2.0, Exif Ver.2.3, MPF Baseline compliant), RAW (Sony ARW 2.3 format)
	3:2 aspect ratio L: 6000 x 4000 (24M), M: 4240 x 2832 (12M), S: 3008 x 2000 (6.0M)
Image size (pixels)	16:9 aspect ratio L: 6000 x 3376 (20M), M: 4240 x 2400 (10M), S: 3008 x 1688 (5.1M)
	Wide: horizontal 12416 x 1856 (23M), vertical 5356 x 2160 (12M), Standard: horizontal 8192 x 1856 (15M), vertical 3872 x 2160 (8.4M)
Image quality modes	RAW, RAW + JPEG, JPEG Extra fine, JPEG Fine, JPEG Standard
RAW output	14-bit
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 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)
Creative Style	Off, Dynamic Range Optimizer (Auto/Level (1-5)), Auto High Dynamic Range: Auto Exposure Difference, Exposure Difference Level (1.0 to 6.0 EV, 1.0 EV step)
Dynamic range functions	Off, Dynamic Range Optimizer (Auto/Level (1-5)), Auto High Dynamic Range: Auto Exposure Difference, Exposure Difference Level (1.0 to 6.0 EV, 1.0 EV step)
Color space	sRGB standard (with sYCC gamut) and Adobe RGB standard compatible with TRILUMINOS Color
Recording system (movies)	
Recording format	XAVC S / AVCHD format Ver. 2.0 compliant / MP4
	XAVC S: MPEG-4 AVC/H.264
Video compression	AVCHD: MPEG-4 AVC/H.264
	MP4: MPEG-4 AVC/H.264
	XAVC S: LPCM, 2ch
Audio recording format	AVCHD: Dolby Digital (AC-3), 2ch, Dolby Digital Stereo Creator
	MP4: MPEG-4 AAC-LC, 2ch
	XAVC S 4k: 3840 x 2160 (30p/100Mbps, 30p/60Mbps, 24p/100Mbps, 24p/60Mbps)
	XAVC S HD: 1920 x 1080 (60p/50Mbps, 30p/50Mbps, 24p/50Mbps, 120p/100Mbps, 120p/60Mbps)
NTSC	AVCHD: 1920 x 1080 (60p/28Mbps/PS, 60i/24Mbps/FX, 60i/17Mbps/FH, 24p/24Mbps/FX, 24p/17Mbps/FH)
	MP4: 1920 x 1080 (60p/28Mbps, 30p/16Mbps), 1280 x 720 (30p/6Mbps)
Image size (pixels)	XAVC S 4k: 3840 x 2160 (25p/100Mbps, 25p/60Mbps)
	XAVC S HD: 1920 x 1080 (50p/50Mbps, 25p/50Mbps, 100p/100Mbps, 100p/60Mbps)
PAL	AVCHD: 1920 x 1080 (50p/28Mbps/PS, 50i/24Mbps/FX, 50i/17Mbps/FH, 25p/24Mbps/FX, 25p/17Mbps/FH)
	MP4: 1920 x 1080 (50p/28Mbps, 25p/16Mbps), 1280 x 720 (25p/6Mbps)
	NTSC mode: 1920x1080 (60p, 30p, 24p)
Slow & Quick motion (S&Q) Record Setting	PAL mode: 1920x1080 (50p, 25p)
	NTSC mode: 11fps, 2fps, 4fps, 8fps, 15fps, 30fps, 60fps, 120fps
Slow & Quick motion (S&Q) Frame Rate	PAL mode: 1fps, 2fps, 3fps, 6fps, 12fps, 25fps, 50fps, 100fps
Picture Profile	Yes (Off / PPI-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	xxVCC standard (x.v.Color when connected via HDMI cable) compatible with TRILUMINOS Color
Clean HDMI output	
	NTSC 3840 x 2160 (30p/24p) / 1920 x 1080 (60p/24p) / 1920 x 1080 (60i), YCbCr 4:2:2 8bit / RGB 8bit
	PAL 3840 x 2160 (25p) / 1920 x 1080 (50p) / 1920 x 1080 (50i), YCbCr 4:2:2 8bit / RGB 8bit
Media	
Media	Memory Stick PRO Duo, Memory Stick PRO-HG Duo, Memory Stick (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
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 51200
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	G7 to M7 (57 steps), A7 to B7 (29 steps)
Priority Set in AWB	Yes
Bracketing	3 frames, H/L selectable
Focus system	
Type	Fast Hybrid AF (phase-detection AF/contrast-detection AF)
Focus point	425 points (phase-detection AF) / 169 points (contrast-detection AF)
Sensitivity range	EV-1 to EV20 (ISO 100 equivalent with F2.0 lens attached)
AF modes	Automatic AF (AF-A), Single-shot AF (AF-S), Continuous AF (AF-C), Direct Manual Focus (DMF), Manual Focus
Focus area	Wide (425 points (phase-detection AF), 169 points (contrast-detection AF)) / Zone / Center / Flexible Spot (S/M/L) / Expand Flexible Spot / Lock-on AF (Wide / Zone / Center / Flexible Spot (S/M/L) / Expand Flexible Spot)
Focus type with LA-EA3 (sold separately)	Phase-detection/contrast-detection selectable
Other features	Lock-on AF, Eye AF, Predictive control, 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. 0.30-3m), AF ON
Exposure control	
Metering type	1200-zone evaluative metering
Metering sensor	Exmor CMOS sensor
Metering sensitivity	EV-2 to EV20 [at ISO 100 equivalent with F2.0 lens attached]
Metering modes	Multi-segment, Center-weighted, Spot (Standard/Large), Entire Screen Avg., Highlight
Exposure modes	Auto (iAuto, Superior Auto), Programmed AE (P), Aperture priority (A), Shutter-speed priority (S), Manual (M), Scene Selection, Sweep Panorama, Movie/S&Q motion (Programmed AE (P) / Aperture priority (A) / Shutter-speed priority (S) / Manual (M))
Scene Selection	Portrait, Landscape, Macro, Sports Action, Sunset, Night Portrait, Night Scene, Hand-held Twilight, Anti Motion Blur
Exposure compensation	+/- 5.0 EV (in 1/3 EV or 1/2 EV steps)
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.
ISO sensitivity (Recommended Exposure Index)	Still images: ISO 100-25600 (expandable to 51200), AUTO (ISO 100-6400, selectable lower limit and upper limit), Movies: ISO 100-25600 equivalent, AUTO (ISO 100-6400 equivalent, selectable lower limit and upper limit)
Viewfinder	
Type	XGA OLED, 1.0cm (0.39 type) electronic viewfinder (color)
Total number of dots	2,359,296 dots
Brightness control	Auto/Manual (5 steps between -2 and +2)
Color temperature control	Manual (5 steps)
Field coverage	100%
Magnification	Approx. 1.07x (35mm camera equivalent: Approx. 0.70x) with 50mm lens at infinity, -1m ⁻¹
Dioptr adjustment	-4.0 to +3.0m ⁻¹
Eye point	Approx. 23mm from the eyepiece lens, 21.4mm from the eyepiece frame at -1m ⁻¹ (CIPA standard)
Display	Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge
Real-time image-adjustment display	On / Off
Finder Frame Rate selection	Yes (1x, 2x)

Trademarks & Remarks

- α**: "G Master", "4D FOCUS", "Exmor", "BIONZ X", "BRAVIA", "SteadyShot", "VAIO", "InfoLithium", "Translucent Mirror Technology", "Tru-Finder", "Memory Stick", "Memory Stick PRO Duo", "Memory Stick XC-HG Duo", "Memory Stick PRO-HG Duo", "PlayMemories Home", "PlayMemories Studio", "PlayMemories Online", "PlayMemories Mobile", "PlayMemories Camera Apps", "x.v.Color", "TRILUMINOS", "TRILUMINOS Color" and "TRILUMINOS Display" are trademarks or registered trademarks of Sony Corporation.
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- "InfoLithium" is a lithium battery pack which can exchange data with compatible electronic equipment about its energy consumption.
- Sony recommends that you use the battery pack with electronic equipment bearing the "InfoLithium" mark.
- Screen displays and effects used to illustrate some functions are simulated.

http://www.sony.net/digitalimaging/

LCD screen	
Type	7.5cm (3.0-type) wide type TFT
Total number of dots	921,600 dots
Touch Panel	Yes
Touch Focus	Yes (Touch Panel / Touch Pad)
Brightness control	Manual (5 steps between -2 and +2), Sunny Weather mode
Adjustable angle	Up approx. 90 degrees, down approx. 45 degrees
Display selector (Finder/LCD)	Auto / Manual
Display	Graphic Display / Display All Info. / No Disp. Info. / Histogram / Digital Level Gauge / Shooting information for viewfinder mode
Real-time image-adjustment display	On / Off
Focus magnifier	5.9x, 11.7x
Zebra	Yes (selectable level + range or lower limit as custom setting)
Peaking MF	Yes (Level setting: High/Mid/Low/Off, Color: White/Red/Yellow)
Other features	
Face detection	On / On (Regist. Faces) / Off, Face registration, Face selection (Max. number of detectable faces: 8)
Auto Object Framing	Yes
Clear Image Zoom	Still / Movie: Approx. 2x
	Smart zoom (still images) M: Approx. 1.4x, S: Approx. 2.0x
Digital zoom	Digital zoom (still images) L: Approx. 4x, M: Approx. 5.7x, S: Approx. 8x
	Digital zoom (movies) Approx. 4x
PlayMemories Camera Apps	Yes
Lens compensation	Peripheral Shading, Chromatic Aberration, Distortion
Zoom Ring Rotate	Yes
Others	ISO Auto Minimum Shutter Speed, Bright Monitoring, Copyright Info, Set File Name, Location Information Link
Shutter	
Type	Electronically controlled, vertical-traverse, focal-plane type
	Still images: 1/4000 to 30 sec., Bulb
	Movies: 1/4000 to 1/4 (1/3 step)
Shutter speed	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)
Flash sync. speed	1/160 sec.
Electronic front curtain shutter	Yes, On / Off
Silent Shooting	Yes, On / Off
SteadyShot INSIDE (image stabilization)	
Type	Image Sensor-Shift mechanism with 5-axis compensation (compensation depends on lens specifications)
Compensation effect	5-stops-faster shutter speed (based on CIPA standard. Pitch/yaw shake only. With Sonnar T* FE 55mm F1.8 ZA lens mounted. Long exposure NR off).
Flash control	
Control	Built-in flash
Guide No.	6 (in meters at ISO 100)
Flash coverage	16mm (focal length printed on the lens body)
Control	Pre-flash TTL
Flash compensation	+/- 3.0 EV (switchable between 1/3 and 1/2 EV steps)
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, 2.0, 1.3 EV increments.
Flash modes	Flash off, Autoflash, Fill-flash, Rear Sync., Slow Sync., Red-eye reduction (On/Off selectable), Hi-speed sync ¹ , Wireless ¹
Recycling time	Approx. 4 sec.
External flash	Sony α System Flash compatible with Multi Interface Shoe. Attach the shoe adaptor for flash compatible with Auto-lock Accessory Shoe.
FE level lock	Yes
Wireless control	Yes (wireless flash with lighting ratio control)
Drive	
Drive modes	Single shooting, Continuous shooting (Hi+/Hi/Mid/Lo selectable), Self-timer, Self-timer (Cont.), Bracketing (Cont., Single, White Balance, DRO)
	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 2 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)
Speed (approx., max.) ^{1,2}	Continuous mode: 11fps (Hi+), 8fps (Hi), 6fps (Mid), 3fps (Lo)
No. of recordable frames ² (approx.)	233 frames (JPEG Extra fine L), 269 frames (JPEG Fine L), 301 frames (JPEG Standard L), 107 frames (RAW), 100 frames (RAW & JPEG)
Playback	
Modes	Single (with or without shooting information, Y RGB histogram & highlight/shadow warning), 12/30-frame index view, Enlarged display mode (Maximum magnification L: 16.7x, M: 11.8x, S: 8.3x), 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, Photo Capture
Interface	
PC interface	Mass Storage, MTP, PC Remote
Multi / Micro USB Terminal	Yes ³
Wireless LAN (built-in)	Wi-Fi compatible, IEEE802.11b/g/n (2.4GHz band) ⁴ , 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)
Bluetooth	Yes (Bluetooth Standard Ver. 4.1 (2.4GHz band))
HD output	HDMI micro connector (Type-D), BRAVIA Sync (link menu), PhotoTV HD, 4K movie output, 4K still image playback
Multi Interface Shoe	Yes
Others	Microphone terminal (3.5mm Stereo mini jack)
Audio	
Microphone	Built-in stereo microphone or XLR-K2M / XLR-K1M / ECM-XYSTIM (sold separately)
Speaker	Built-in, monaural
Print	
Compatible standards	Exif Print, Print Image Matching III, DPOF setting
Custom function	
Type	Custom key settings, Programmable setting
Memory function	Yes (Body: 2 sets/ Memory card: 4 sets)
Power	
Battery	Rechargeable battery pack NP-FW50
Still images	Approx. 310 shots (viewfinder) / Approx. 350 shots (LCD screen) (CIPA standard)
Movies	Actual ^{5,6} : Approx. 65 min. (viewfinder) / Approx. 70 min. (LCD screen) (CIPA standard)
	Continuous ⁷ : Approx. 105 min. (viewfinder) / Approx. 105 min. (LCD screen) (CIPA standard)
External power	AC Adaptor AC-PW20 (sold separately)
Weight	
With battery and memory card	Approx. 453g (approx. 1 lb.)
Body only	Approx. 410g (approx. 14.5 oz.)
Dimensions	
W x H x D (excluding protrusions)	Approx. 120.0mm x 66.9mm x 53.3mm (approx. 4.3/4 x 2.3/4 x 2.1/8 in.)
Operating temperature	
Range	32°-104°F / 0-40°C

Specifications and features are subject to change without notice.

- ¹ With compatible external flash.
- ² With "Hi +" continuous shooting mode. Approximate. May vary depending on shooting conditions and media.
- ³ Supports Micro USB-compatible device.
- ⁴ Configuration method/Access method: WPS or manually/infrastructure mode. When connecting to smartphones, the camera can always work as a base without a wireless access point. (Security: WEP/WPA-PSK/WPA2-PSK)
- ⁵ Continuous movie recording is possible for approximately 29 minutes (limited by product specifications).
- ⁶ Indicated recording time is defined by repeating the following cycle: Power on, start recording, zoom, stand-by and power off.
- ⁷ Indicated recording time is defined by repeating the following cycle: Pressing the MOVIE button. No other operations such as zoom are performed.

Accessories



Body Case

LCS-EBG



Eyepiece Cup

FDA-EP17

SONY

Interchangeable-lens digital camera

α6500



4D FOCUS

The Power of Imaging

Printed in Japan

The palm-sized all-around all-star

4D FOCUS Focus at the speed of sight

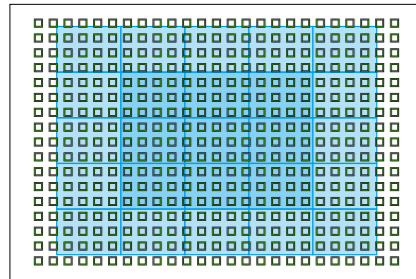


Capture the height of every moment—the world's fastest^{*1} autofocus system with highest^{*2} number of AF points responds flawlessly to virtually any shooting situation.

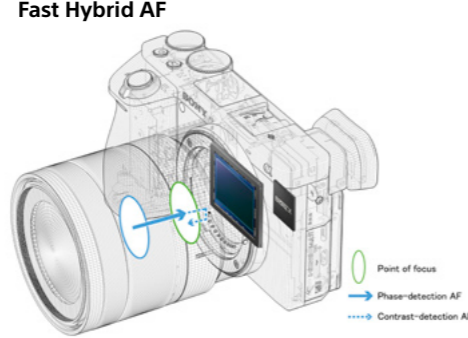
Wide 425 points
World's highest^{*2} number of AF points

Fast 0.05 sec.
World's fastest^{*1} AF speed
Fast Hybrid AF

Steadfast
High-density Tracking AF Technology



Phase-detection AF coverage (425 points)
Contrast-detection AF coverage (169 points*)
* 25 points + 144 points (each of 9 central AF points is divided into 16 segments.)



Point of focus
Phase-detection AF
Contrast-detection AF
AF points that appear on actual screen
AF algorithm (not shown on actual screen)

*1 Among interchangeable-lens digital cameras equipped with an APS-C image sensor as of October 2016, based on Sony research, measured using CIPA-compliant guidelines, and internal measurement method with an E PZ 16-50mm F3.5-5.6 OSS lens mounted, Pre-AF off and viewfinder in use.
*2 Among digital cameras as of October 2016, based on Sony research.

High speed continuous shooting

Live-view continuous shooting with minimal lag

High-speed continuous shooting is available at up to approx. 11fps (Hi+), and up to approx. 8 fps (Hi) in live-view. In live-view continuous shooting at up to 8fps, display lag on the EVF or LCD screen is kept to an absolute minimum, so you can capture moving subjects just as if you are shooting using an optical viewfinder.

Huge buffer in continuous shooting

Faster internal processing and a higher-capacity buffer memory now allow up to 307 shots (around 36 seconds)* of high-speed continuous shooting. This increases the chances of capturing more decisive moments.

* With "Hi" continuous shooting mode and "Fine" image quality.



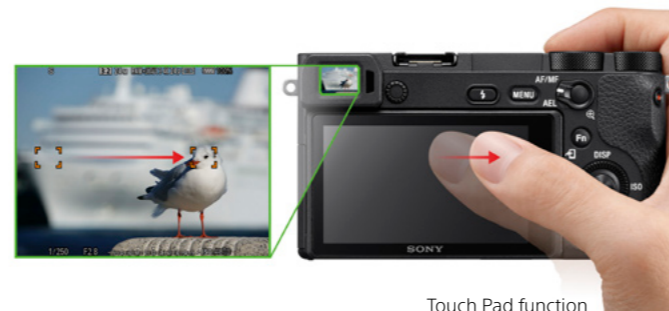
Focus evolves with a touch

Touch Focus

Touch Focus makes it particularly easy to adjust focus quickly, so you don't miss the chance to capture your chosen subject. Simply touch the screen at the decisive moment.

Touch Pad function

Just swipe your fingertip to shift focus point from one area to another while looking at the viewfinder.



Touch Pad function

5-axis SteadyShot™ INSIDE

Built-in stabilization, complete and compact

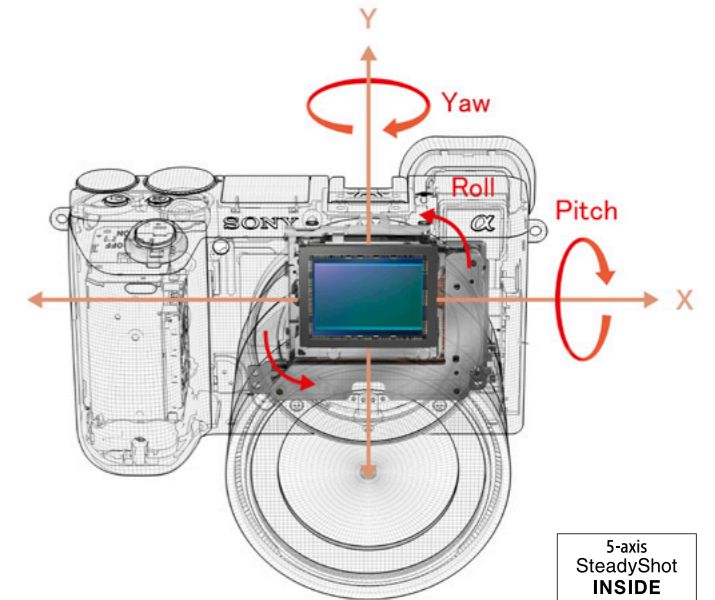
Equivalent to using a 5-stops-faster* shutter speed, this system detects and compensates for pitch and yaw shake, which tends to occur more at longer focal lengths; X- and Y-axis shift shake, which becomes more apparent when shooting at a high magnification such as in macro photography; and roll shake about the Z-axis, which often occurs with night shots and movie shooting. This camera shake compensation system is very effective for shooting steadier, clearer movies and still images.

* Based on CIPA standard. Pitch/yaw stabilization only. With Sonnar T* FE 55mm F1.8 ZA lens mounted. Long exposure NR off.

Compatibility with wide-ranging mountable lenses

5-axis image stabilization lets you enjoy unparalleled handheld shooting freedom with more of your favorite mountable lenses. The short flange-back in the E-mount of the α6500 extends compatibility with a range of lenses.

Note: When using a third-party mount adaptor, performance, functionality and operation are not guaranteed and Sony will take no responsibility if a malfunction occurs.



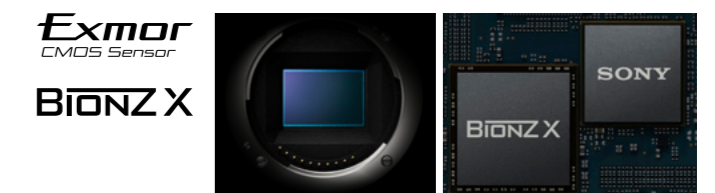
5-axis SteadyShot INSIDE



Inside imaging innovation

The α6500 features an APS-C image sensor with approx. 24.2 effective megapixels plus thin wiring layer and large photodiode substrate for light collection efficiency. Combined with BIONZ X™ image processing engine as well as a newly developed front-end LSI that supports the engine's image processing, the image sensor achieves a wide sensitivity range of ISO 100-51200* with better image clarity and lower noise.

* Standard ISO range: 100-25600 for stills and movies. Expandable up to ISO 51200 for stills only.

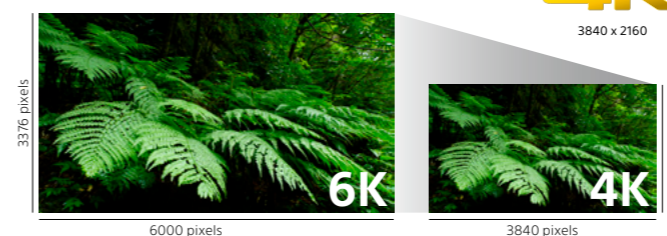


NO.1 No.1 image sensor manufacturer for digital cameras and video recorders. Based on Sony research - April 2015 to March 2016 (over 50% market share).

4K movies^{*1} oversampled from 6K (20MP)

Full pixel readout without pixel binning collects approx. 2.4 times^{*2} (6K equivalent) as much information as is required for 4K (QFHD: 3840 x 2160) movie output. This oversampling effect gives 4K images realistic depth and dimension.

*1 SDHC/SDXC memory card of Class 10 or higher is required. UHS-I (U3) SDHC/SDXC card is required for 100Mbps recording.
*2 In 24p recording. Approx. 1.6 times in 30p recording.



Newly designed shutter

Shutter braking system and elastic shock-absorbing material reduce blur resulting from vibration, maximize image sharpness and suppress shutter sound. Shutter durability is tested to withstand about 200,000 shutter cycles*.

* With the electronic front curtain shutter, under internal test conditions of Sony.

