

# SONY



## FS7 II

PXW-FS7M2/FS7M2K

Solid-State Memory Camcorder

α Mount System

XDCM

Exmor  
CMOS Sensor

XAVC

MPEG HD422

4K



Shotgun microphone is sold separately.



FS7 II dramatically improves the experience of shooting with Sony's ultimate documentary camcorder and simply one of the world's most versatile Super 35mm camcorders. A host of enhancements, from world-leading Electronic Variable ND system to lever lock type E-mount and enhanced ergonomics, transform the possibilities of what you can do. Shoot and move. Handheld, shoulder-mount or suspended from a gimbal. FS7 II delivers the spectacular imagery you expect from Sony.

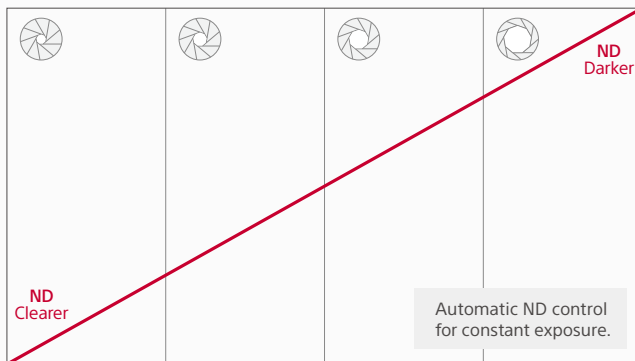
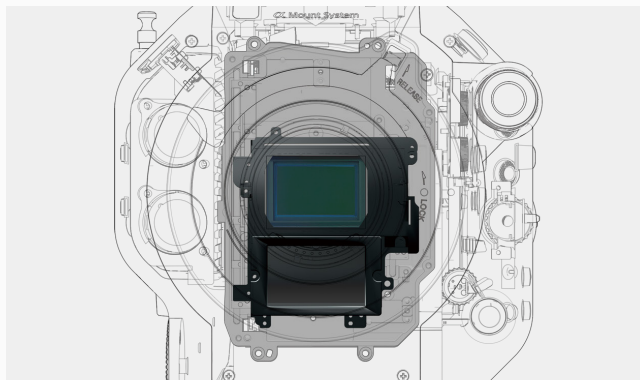
## Electronic Variable ND Filter

### Freedom to shoot and move with Electronic Auto Variable ND

Shooting with FS7 II is a truly liberating experience. Sony's unrivalled technology, the Electronic Variable ND Filter, can be manually controlled from 1/4ND to 1/128ND linearly either by the dial on the operator's side of the camera or via the front wheel on the SmartGrip. In addition, you can choose Auto Variable ND mode and let the camera adjust for ideal exposure - shoot and move with no need to worry about changing light conditions, no time wasted fiddling with exposure settings or changing filters. Variable ND filter can also compensate for exposure changes caused by iris control while adjusting the depth of field (details in the chart below). Alternatively, the operator can adjust exposure while keeping the same depth of field in changing shooting or lighting environments.



Seamless DoF (Depth of Field) transition (Footage)



Seamless DoF (Depth of Field) transition (Chart)

# High Performance Super 35mm with Ultimate Versatility

## Lever Lock Type E-mount

### E-mount flexibility extended

E-mount offers unsurpassed compatibility with Sony lenses. And for FS7 II there's an all-new lever lock design. The FS7 II's new E-mount (lever lock type) gives users the ability to change lenses by rotating the locking collar rather than the lens itself, which means that in most cases lens support rigs don't need to be removed, saves time during a production. The process of switching lens can be simplified to save time. Whatever your lens requirements, FS7 II has you covered.

You also have the choice of purchasing the FS7 II on its own (PXW-FS7M2) or with SELP18110G lens (PXW-FS7M2K).



## Super 35mm Zoom Lens

### Super 35/APS-C power zoom for 4K movies

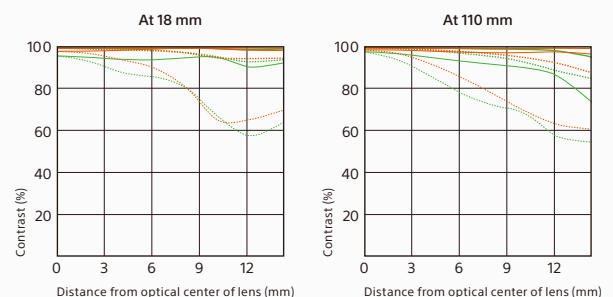
SELP18110G powered zoom lens delivers optimum performance in Super 35/APS-C moviemaking applications, starting at 18 mm wide-angle and extending through an impressive 6.1x zoom range with a constant F4 maximum aperture.

### G Lens optical performance suitable for 4K throughout the zoom range.

- Lag-free mechanical manual zoom for high-level, versatile zoom control.
- Refined manual focus operation for subtle adjustment.
- Optical SteadyShot image stabilization helps keep images blur-free as well as minimising the need to boost ISO in low light conditions.
- Compact, lightweight design ideal for active shooting and when using gimbals.
- Reliable in challenging conditions with a sealed dust and moisture resistant design.



E PZ 18-110mm F4 G OSS / SELP18110G



Spatial frequency	Max. aperture		F8 aperture	
	R	T	R	T
10 line pairs / mm	—	—	—	—
30 line pairs / mm	—	—	—	—

R: Radial values T: Tangential values

## Other Features

### Comfortable to use, especially when operating for hours in the field

- Ten assign buttons
- Viewfinder arm and mic holder can be swapped for left-eye shooting.
- More settings for the telescoping arm

### 180fps High Frame Rate in Full HD without cropping

Sony's XAVC Intra and XAVC Long recording system for luxurious colour at money-saving bitrates

Support for the BT.2020

XQD™ memory cards, as next-generation memory

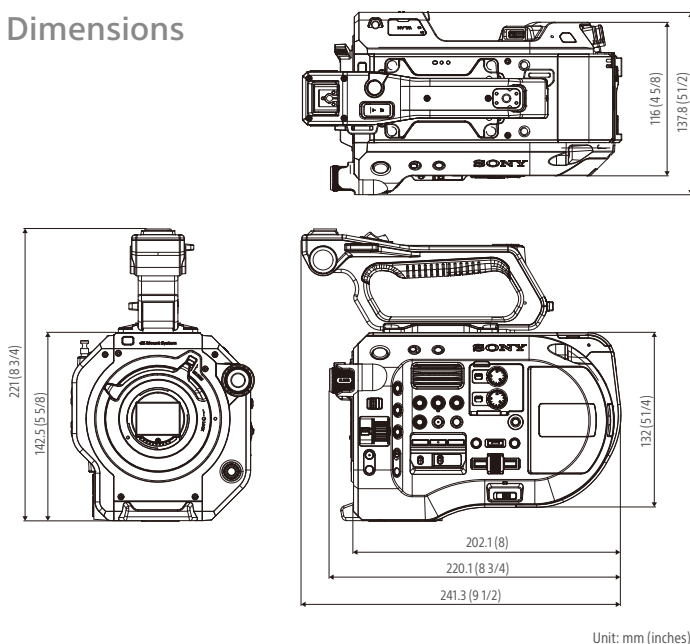
# Specifications

PXW-FS7M2	
<b>General</b>	
Mass	Approx. 2.0 kg (body only) Approx. 4.5 kg (with Viewfinder, Eyepiece, Grip Remote Control, BP-U30 battery, SELP18110G LENS, an XQD memory card)
Dimensions (W x H x D)*	159 x 245.5 x 247 mm (body without protrusions)
Power Requirements	DC 16.5 V (battery pack) DC 12.0 V (AC adaptor)
Power Consumption	Approx. 19 W (while recording XAVC-I QFHD 59.94P, SELP18110G Lens, Viewfinder ON, not using external device)
Operating Temperature	0°C to 40°C (32°F to 104°F)
Storage Temperature	-20°C to +60°C (-4°F to +140°F)
Battery Operating Time	Approx. 1 hrs. with BP-U30 battery (while recording XAVC-I QFHD 59.94P, SELP18110G Lens, Viewfinder ON, not using external device) Approx. 2 hrs. with BP-U60 battery (while recording XAVC-I QFHD 59.94P, SELP18110G Lens, Viewfinder ON, not using external device) Approx. 3 hrs. with BP-U90 battery (while recording XAVC-I QFHD 59.94P, SELP18110G Lens, Viewfinder ON, not using external device)
Recording Format (Video)	<XAVC Intra> XAVC-I mode: DCI4K 59.94P CBG, bit rate 600Mbps, MPEG-4 H.264/AVC XAVC-I mode: DCI4K 50P CBG, bit rate 500Mbps, MPEG-4 H.264/AVC XAVC-I mode: DCI4K 29.97P CBG, bit rate 300Mbps, MPEG-4 H.264/AVC XAVC-I mode: DCI4K 23.98P CBG, bit rate 240Mbps, MPEG-4 H.264/AVC XAVC-I mode: DCI4K 24.00P CBG, bit rate 240Mbps, MPEG-4 H.264/AVC XAVC-I mode: DCI4K 25P CBG, bit rate 250Mbps, MPEG-4 H.264/AVC XAVC-I mode: QFHD 59.94P CBG, bit rate 600Mbps, MPEG-4 H.264/AVC XAVC-I mode: QFHD 50P CBG, bit rate 500Mbps, MPEG-4 H.264/AVC XAVC-I mode: QFHD 29.97P CBG, bit rate 300Mbps, MPEG-4 H.264/AVC XAVC-I mode: QFHD 23.98P CBG, bit rate 240Mbps, MPEG-4 H.264/AVC XAVC-I mode: QFHD 25P CBG, bit rate 250Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 59.94P VBR, maximum bit rate 222Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 50P VBR, maximum bit rate 185Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 59.94i VBR, maximum bit rate 111Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 50i VBR, maximum bit rate 112Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 29.97P VBR, maximum bit rate 111Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 23.98P VBR, maximum bit rate 89Mbps, MPEG-4 H.264/AVC XAVC-I mode: HD 25P VBR, maximum bit rate 112Mbps, MPEG-4 H.264/AVC <XAVC Long> XAVC-L QFHD 59.94P/50P mode: VBR, maximum bit rate 150Mbps, MPEG-4 H.264/AVC XAVC-L QFHD 29.97P/23.98P/25P mode: VBR, maximum bit rate 100Mbps, MPEG-4 H.264/AVC XAVC-L HD 50 mode: VBR, maximum bit rate 50Mbps, MPEG-4 H.264/AVC XAVC-L HD 35 mode: VBR, maximum bit rate 35Mbps, MPEG-4 H.264/AVC XAVC-L HD 25 mode: VBR, maximum bit rate 25Mbps, MPEG-4 H.264/AVC <MPEG-2 Long GOP> MPEG HD422 mode: CBR, maximum bit rate 50Mbps, MPEG-2 422P@HL Recording Format (Audio) Recording Frame Rate LPCM 24 bits, 48 kHz, 4 channels <XAVC Intra> XAVC-I DCI4K mode: 4096x2160/59.94P, 50P, 29.97P, 23.98P, 24P, 25P XAVC-I QFHD mode: 3840x2160/59.94P, 50P, 29.97P, 23.98P, 25P XAVC-I HD mode: 1920x1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P <XAVC Long> XAVC-L QFHD mode: 3840x2160/59.94P, 50P, 29.97P, 23.98P, 25P XAVC-L HD 50 mode: 1920x1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P XAVC-L 35 mode: 1920x1080/59.94P, 50P, 59.94i, 50i, 29.97P, 23.98P, 25P XAVC-L 25 mode: 1920x1080/59.94i, 50i <MPEG-2 Long GOP> MPEG HD422 mode: 1920x1080/59.94i, 50i, 29.97P, 23.98P, 25P 1280x720/59.94P, 50P, 29.97P, 23.98P, 25P

PXW-FS7M2	
Recording/Playback Time	<XAVC Intra> XAVC-I mode QFHD 59.94P When using QD-G128E (128GB): Approx. 22 minutes XAVC-I mode QFHD 50P When using QD-G128E (128GB): Approx. 26 minutes XAVC-I mode QFHD 29.97P When using QD-G128E (128GB): Approx. 44 minutes XAVC-I mode QFHD 23.98P When using QD-G128E (128GB): Approx. 55 minutes XAVC-I mode QFHD 25P When using QD-G128E (128GB): Approx. 52 minutes XAVC-I mode HD 59.94P When using QD-G128E (128GB): Approx. 59 minutes XAVC-I mode HD 50P When using QD-G128E (128GB): Approx. 71 minutes XAVC-I mode HD 59.94i When using QD-G128E (128GB): Approx. 118 minutes XAVC-I mode HD 50i When using QD-G128E (128GB): Approx. 141 minutes XAVC-I mode HD 29.97P When using QD-G128E (128GB): Approx. 118 minutes XAVC-I mode HD 23.98P When using QD-G128E (128GB): Approx. 147 minutes XAVC-I mode HD 25P When using QD-G128E (128GB): Approx. 141 minutes <XAVC Long> XAVC-L mode QFHD 59.94P/50P When using QD-G128E (128GB): Approx. 87 minutes XAVC-L mode QFHD 29.97P/23.98P/25P mode: When using QD-G128E (128GB): Approx. 131 minutes XAVC-L 50 mode When using QD-G128E (128GB): Approx. 262 minutes XAVC-L 35 mode When using QD-G128E (128GB): Approx. 374 minutes XAVC-L 25 mode When using QD-G128E (128GB): Approx. 524 minutes <MPEG-2 Long GOP> MPEG HD422 mode When using QD-G128E (128GB): Approx. 262 minutes
<b>Lens</b>	
Lens Mount	E-mount (lever lock type)
<b>Camera Section</b>	
Imaging Device (Type)	Super35 type Single-chip Exmor CMOS
Effective Picture Elements	17.9 4096 (H) x 2160 (V) 16.9 3840 (H) x 2160 (V)
Built-in Optical Filters	ND filters OFF: CLEAR 1: 1/4ND 2: 1/16ND 3: 1/64ND Linear variable ND (1/4ND to 1/128ND)
Sensitivity (2000 lx, 89.9% reflectance)	Video Gamma: T14 (3840 x 2160/23.98P mode 3200K)
ISO Sensitivity	ISO 2000 (S-Log3 Gamma D55 Light source)
Minimum Illumination	0.7 lx (-18dB, S-Log3 Shutter OFF, ND Clear, F1.4)
S/N Ratio	57 dB (V) (typical)
Shutter Speed	1/3 sec to 1/9,000 sec
Slow & Quick Motion Function	XAVC-I mode 3840 x 2160: 1 to 60 frames (59.94P, 50P, 29.97P, 23.98P, 25P) XAVC-I mode 1920 x 1080: 1 to 180 frames (59.94P, 29.97P, 23.98P) 1 to 150 frames (50P, 25P) XAVC-L mode 3840x2160: 1 to 60 frames (59.94P, 50P, 29.97P, 23.98P, 25P) XAVC-L mode 1920x1080: 1 to 120 frames (59.94P, 50P, 29.97P, 23.98P, 25P)
White Balance	Preset, Memory A, Memory B (1500K-50000K) / ATW
Gain	-3, 0, 3, 6, 9, 12, 18 dB, AGC
Gamma Curve	STD, HG, User, S-Log2, S-Log3
<b>Input/Output</b>	
Audio Input	XLR-type 3-pin (female) (x2), line/mic/mix +48 V selectable Mic Reference: -40, -50, -60 dBu
SDI Output	BNC(x2), switchable with 3G-SDI/HD-SDI SMTPE292M/424M/425M
DC Input	USB device, mini-B (x1)
Headphone Output	Stereo mini jack (x1) -16 dBu 16Ω
Speaker Output	Monaural
DC Input	DC jack
Remote	Stereo mini-mini jack (ø2.5 mm)
HDMI Output	Type A (x1)
Option	4-pin, Type A for W-LAN (x1)
<b>Monitoring</b>	
Built-in LCD Monitor	8.8 cm (3.5 type) Approx. 1.56M dots
<b>Built-in Microphone</b>	Omni-directional monaural electret condenser microphone
<b>Media</b>	
Type	XQD Card slot (x2) SD Card slot (x1) for saving configuration data
<b>Supplied Accessories</b>	Body Cap (1) Viewfinder (1) Viewfinder hood (1) Eyepiece (1) Grip Remote Control (1) USB wireless LAN module IFU-WLM3 (1) Infrared remote commander RMT-845 (1) WA Adaptor Bracket (1) AC Adaptor (1) BC-U1 battery charger (1) BP-U30 battery pack (1) Power cord (2) USB cable (1) Operating Guide (1) CD-ROM "Manuals for Solid-State Memory Camcorder" (1)

\* The values for dimensions are approximate.

# Dimensions



<http://www.sony.net/pro/PXW-FS7M2/>



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