

# Videoscope

## Available for rent: PMWF3K Super 35mm XDCAM EX Camera



The Sony PMW-F3 inherits many features from the F35, which has been used for years in high-end digital cinematography, as well as most of the features and file-based workflow capabilities of PMW-EX1R and PMW-EX3 XDCAM EX solid-state memory camcorders. The PMW-F3 is equipped with the Exmor™ Super 35 CMOS image sensor, PL lens mount, and SxS card for 1920 x 1080 full-HD recording. The PMW-F3 features future expandability, including RGB 4:4:4 baseband output with S-LOG gamma for external recording which means it can be used in an HDCAM-SR™ workflow. It also offers a 3D-LINK option, which allows two camcorders to be controlled simultaneously for 3D stereoscopic shooting.

### Features

- The Sony PMW-F3 is equipped with a newly developed Exmor Super 35 CMOS image sensor which offers creative shallow depth of field, similar to that of a film camera. This sensor has an extremely high sensitivity of F11 (ISO800) with a very low noise level (an S/N ratio of 63 dB). This is a significant advantage especially when shooting in low-light conditions or at night using only ambient light

- The PMW-F3 employs a PL lens mount that is standard for film cameras, allowing use of a virtually unlimited number of prime and zoom lenses for 35-mm film cameras. This greatly broadens the choice of lenses for a wider spectrum of creative expression. A PL lens mount adapter comes with the camera as standard. The PMW-F3 supports the Cooke/i Technology protocol, which enables the camcorder to communicate with the lens to obtain lens metadata such as focus and iris position. The ARRI LDS interface will be supported as well. This improves post-production workflow as lens metadata can be recorded onto an SxS card and brought into the post-production process.
- The recording format and recording media are identical to the existing PMW-EX1R and PMW-EX3, and proven, high-speed, intuitive XDCAM EX workflow can be used with high reliability. This workflow offers seamless integration with leading nonlinear editing software.
- The Sony PMW-F3 has a small, compact body with a very modest footprint, and weighs just 2.4 kg (5 lb 4 oz). It offers mobility, flexibility, and cost efficiency. In addition, the camcorder's power consumption is only 24 W, and about three hours' recording can be achieved with only one BP-U60 battery.
- The Sony PMW-F3 has an HD-SDI Dual-link output connector which offers 4:2:2 1080 50/59.94p uncompressed signal output as standard. By using external recording devices such as HDCAM-SR recorders, users can achieve x 2.5 natural slow-motion playback in 1080/24p mode.
- The Sony PMW-F3 delivers a scalable external recording solution. When the RGB and S-LOG output option is added, RGB 4:4:4 baseband signal output is available for external recording devices such as HDCAM-SR recorders. A LUT (Look Up Table) function is also provided for monitoring purposes when S-LOG output is activated. The same option includes 3G-SDI output functionality. It enables users to select Dual-link HD-SDI or 3G-SDI depending on the connecting devices.
- Another feature of the Sony PMW-F3 is the 3D-LINK option which is especially convenient for 3D stereoscopic shooting. Two Sony PMW-F3 cameras can be controlled by one camera remote controller at the same time. The two cameras are connected with a special 10-pin cable that includes genlock, timecode in/out, and control line. Simultaneous control of the Iris and Focus functions of two cameras is extremely useful.

## Camera Section Specifications

## Detail:

Built-in Optical Filters	OFF: Clear, 1: 1/8ND, 2: 1/64ND
Gain	-3, 0, 3 ,6, 9, 12, 18 dB, AGC
Imaging Device	Exmor Super 35mm equivalent CMOS
S/N Ratio	63 dB (Y) (Typical)
Sensitivity (2000 lx, 89.9% reflectance)	T11 ISO800 (Typical)
Shutter Speed (Time)	1/32 to 1/2000 sec.
Slow Shutter	2 to 8 frames
White Balance	Preset (3,200 K), Memory A, Memory B/ATW

## General Specifications

Battery Operating Time  
Built-in Microphone  
Dimensions (W x H x D)  
Mass  
Operating Temperature

Power Consumption

Power Requirements

Recording Format

Recording Frame Rate

Recording/Playback Time

Storage Temperature

## Inputs/Outputs Specifications

Audio Input

Audio Output

Composite Output

DC Input

DC Output

EXT 50-pin

Genlock Input

HDMI Output

Headphone Output

Lens Remote

## Detail:

Approx. 130 min (HD-SDI Dual Link ON, w/BP-U60)  
Approx. 170 min (HD-SDI Dual Link OFF, w/BP-U60)

None

151 x 189 x 210 mm (6 x 7 1/2 x 8 3/8 inches)

Approx. 2.4 kg (5 lb 4.7 oz) without accessories

0 °C to 40 °C (32 °F to 104 °F)

Approx. 18 W (Typical) (HD-SDI Dual-Link OFF, VF ON, LCD monitor OFF).

Max. 24 W (Typical) (HD-SDI Dual-Link ON, VF ON, LCD monitor ON)

DC 12 V (11.0 v to 17.0 V)

Video: HD HQ Mode: MPEG-2 MP@HL, 35 Mbps / VBR

HD SP Mode: MPEG-2 MP@H-14,25 Mbps / CBR:  
Audio: LPCM (16 bits, 48 kHz, 2 channels)

HD HQ Mode: 1920 × 1080/59.94i, 50i, 29.97P, 25P,23.98P; 1440 × 1080/59.94P, 50P, 29.97P,25P, 23.98P; 1280 × 720/59.94P, 50P, 29.97P, 25P,23.98P  
HD SP Mode: 1440 × 1080 /59.94i, 50i (23.98P is converted to 59.94i in 2-3 pulldown processing).

HQ Mode:

Approx. 100 min with SBP-32 (32 GB) memory card

Approx. 50 min with SBP-16 (16 GB) memory card

Approx. 25 min with SBP-8 (8 GB) memory card

SP Mode:

Approx. 140 min with SBP-32 (32 GB) memory card

Approx. 70 min with SBP-16 (16 GB) memory card

-20 °C to +60 °C (-4°F to +140 °F)

## Detail:

XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable

RCA phono jacks (x2), -10 dBu (47kO load, reference level)

BNC type (x1), 1.0 Vp-p, 75O, HD-Y or analog composite signal

XLR-type 4-pin

N/A

N/A

BNC (x1)

A-type (x1)

Stereo mini jack (x1), -18 dBu (reference level output, 16O load)

N/A

MIC	XLR-type 3-pin (female) (x2), line/mic/mic +48 V selectable
Remote	8-pin
SDI Output	BNC
Timecode Input	BNC (x1)
Timecode Output	BNC (x1)
USB	Mini-B/USB2.0 Hi-Speed (x1)
i.LINK	i.LINK, IEEE1394, 4-pin connector (x1), S400

### **Lens Specifications**

Focal Length	N/A
Focus	N/A
Iris	N/A
Lens Mount	PL mount (with supplied lens mount adapter)

### **Detail:**

### **Monitoring Specifications**

Built-in LCD Monitor	8.8 cm diagonal (3.5-inch) color LCD, 16:9 Aspect ratio, Picture size 640 (H) × 3 (RGB) × 480 (V) delta sequence, Hybrid (semi-transmissive) type
Viewfinder	1.148 cm diagonal (0.452-inch), 16:9 Aspect ratio, 852 (H) × 480 (V) Picture elements

### **Detail:**



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[www.videoscope.com](http://www.videoscope.com)