SONY
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PMW-F3L
PMW-F3K
Solid-state Memory Camcorder

CINEALTA™

XDCAM EX

SxS

Exmor
Super35 CMOS

Sony Opens Up a New Era of Super 35mm Digital Production

In the year 2000, Sony introduced the HDW-F900 CineAlta™ 24p HDCAM® camcorder, the first-ever 1080/24p recording camcorder for feature films, TV dramas and cinematography production. It became the foundation for a decade of development of Super 35mm digital motion picture cameras such as the F35 and SRW-9000PL.

Now Sony introduces a new member of its CineAlta camcorder line-up: the affordable PMW-F3 Super 35mm camcorder. It inherits DNA 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 EX3 XDCAM EX™ solid-state memory camcorders.

The PMW-F3 is equipped with the newly developed Exmor™ Super 35 CMOS image sensor, PL lens mount adapter, and dual SxS® card slots for 1920 x 1080 full-HD recording. Sony offers two affordable models of the PMW-F3: one is without a lens, the PMW-F3L; the other includes three PL lenses (35/50/85mm, T2.0), the PMW-F3K.

The PMW-F3 features future expandability, including software option (CBK-RGB01)* that enables RGB 4:4:4 baseband signal output with S-LOG gamma for external recording which means it can be used in an HDCAM SR® workflow. Another future offering is a 3D-LINK option (CBK-3DL01)*, which allows two camcorders to be controlled simultaneously for 3D stereoscopic shooting.

Sony believes that - for many content creators - the PMW-F3 breaks entry barriers to digital cinematography and opens up a new era of Super 35mm digital production. With an optional zoom lens scheduled to be introduced from Sony in the winter of 2011*, this makes the F3 camera ideal for a variety of creative productions such as independent film-making, cinematography, music videos, documentaries; delivering mobility, flexibility, and cost efficiency.

*Availability: CBK-RGB01 RGB & S-Log Output Software Option expected Summer 2011, CBK-3DL01 3D Link Software Option expected Fall 2011, Optical Zoom Lens Option expected Winter 2011. Dates of availability are subject to change without notice. Sony makes no guarantees as to future product offerings or release dates.

1. Exmor™ Super 35 CMOS Sensor

The 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.

2. PL Lens Mount

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 35mm 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 a supplied accessory. The PMW-F3 supports the Cooke/i Technology protocol and the ARRI LDS interface, which enables the camcorder to communicate with the lens to obtain lens metadata such as focus and iris position. This improves post-production workflow as lens metadata can be recorded onto an SxS® card and brought into the post-production process.

3. Affordable PL Lens Kit Model

There are two models of the PMW-F3. One is the lens-less PMWF3L offering freedom of lens choices and the other is the PMWF3K package that comes with three fixed focal length PL lenses (35/50/85-mm, T2.0).

4. XDCAM EX™ Workflow

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.

5. Small and Lightweight, With Low Power Consumption

The PMW-F3 has a small, compact body with a very modest footprint, and weighs just 5 lb 4 oz (2.4 kg). It offers mobility, flexibility, and cost efficiency. In addition, the camcorder's power consumption is only 24 W, and up to three hours recording can be achieved with only one BP-U60 battery (sold separately).

6. HD-SDI Dual-link Output

The PMW-F3 has an HD-SDI Dual-link output connector which offers 10 bit 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.

7. RGB & S-LOG Output Option (CBK-RGB01)*

The 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.

8. 3D-LINK Option (CBK-3DL01)*

Another new feature of the PMW-F3 is the 3D-LINK option which is especially convenient for 3D stereoscopic shooting. Two 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.

*Availability: CBK-RGB01 RGB & S-Log Output Software Option expected Summer 2011, CBK-3DL01 3D Link Software Option expected Fall 2011. Dates of availability are subject to change without notice. Sony makes no guarantees as to future product offerings or release dates.

9. Painting capabilities for Digital Imaging Technicians

With the use of either the RMB-150 or RMB-750 controller (sold separately) hooked up to the 8pin remote connector, digital imaging technicians can make various adjustments to the look of the footage captured by PMW-F3 camera based on the needs of the DP. Adjustable parameters are shown below.

10. Native 24P Recording with Slow & Quick Motion

For a film look the PMW-F3 offers native 24P (SD or HD) recording and Slow & Quick Motion function also known as over and under-cranking. These features enable users to create unique 'looks' or special effects with slow- and fast motion images.

Functions operable via RMB150/B750

	Remote Controller Function	Supported operation on the PMW-F3 camcorder	Operation on the RM-B150	Operation on the RM-B750
Camera Function	Menu ON/OFF	MENU button	Yes	Yes
	Master gain selection	GAIN switch	Yes	N/A
	Step gain selection		N/A	Yes
	Color bar signal output ON/OFF	BARS/CAM button	Yes	Yes
	Shutter ON/OFF	SHUTTER switch + CAMERA SET menu →shutter	Yes	Yes
	Shutter speed selection	CAMERA SET menu →shutter	Yes	Yes
	ECS ON/OFF	SHUTTER switch + CAMERA SET menu →shutter	Yes	Yes
	ECS frequency selection	CAMERA SET menu →shutter	Yes	Yes
	Auto white balance	AUTO WHT BAL button	Yes	Yes
	Auto black balance	CAMERA SET menu →Auto Black Bal.	Yes	Yes
	White R/B level adjustments		Yes	Yes
	Black R/B level adjustments		Yes	Yes
	White balance memory selection	WHITE BALANCE switch	Yes	Yes
	Auto tracing white ON/OFF	Assignable button (with "ATW" assigned)	Yes	Yes
	Recording start/stop	REC START/STOP button	Yes	Yes
	Rec review	REC REVIEW button	Yes	Yes
	Rec review stop	STOP button	Yes	Yes
	Playback start	PLAY/PAUSE button	Yes	Yes
	Playback stop	STOP button	Yes	Yes
	Fast-forward playback	F FWD button	Yes	Yes
	Fast-reverse playback	F REV button	Yes	Yes
	Call signal ON/OFF*		N/A	Yes
Picture Profile Menu	Matrix	Setting	N/A	Yes
		Level	N/A	Yes
		R-G, R-B, G-R, G-B, B-R, B-G	N/A	Yes
	Multi Matrix	Setting	N/A	Yes
		Axis	N/A	Yes
		Hue	N/A	Yes
		Saturation	N/A	Yes
	HD Detail SD Detail	Setting	N/A	Yes
		Level	Yes	Yes
		Frequency	N/A	Yes
		Crispening	N/A	Yes
		H/V Ratio	N/A	Yes
		White Limiter	N/A	Yes
		Black Limiter	N/A	Yes
		Knee APT Level	N/A	Yes
	Skin Tone Detail	Setting	Yes	Yes
		Level	Yes	Yes
		Area Indication	N/A	Yes
		Saturation	N/A	Yes
		Phase	N/A	Yes
		Width	N/A	Yes
	Knee	Setting	N/A	Yes
		Auto Knee	Yes	Yes
		Point	Yes	Yes
		Slope	Yes	Yes
		Knee SAT Level	Yes	Yes
	Gamma	Level	Yes	Yes
		Select	N/A	Yes
	Black		Yes	Yes
	Black Gamma		N/A	Yes
	Low Key SAT		N/A	Yes

* When pressing CALL button on the RMB750, the message "CALL" is displayed in the viewfinder of the camcorder.

OTHER FEATURES

PMW-F3K
(Supplied with 35mm, 50mm and 85mm T2.0 PL mount lens)
PMW-F3L
(Camera body only)

1. Picture Profile

The Picture Profile feature of the PMW-F3 allows camera operators to easily call up customized picture-tonal settings to suit particular shooting conditions, rather than having to readjust the camera each time. This gives greater operational efficiency. Up to ten different pictures - including tonal settings such as matrix parameters, color correction, detail, one of eight gamma curves, and knee - can be saved on an SxS® memory card. These settings are displayed on the LCD panel at the touch of a button.

2. Selectable Gamma Curves

The PMW-F3 offers a wide variety of gamma curves to flexibly handle contrast and give a specific 'look' to an image. In addition to six types of standard gamma curve, there are four types of Hyper Gamma which are identical to those on CineAlta™ cameras. Operators can select the best-suited preset gamma curve, depending on scene requirements.
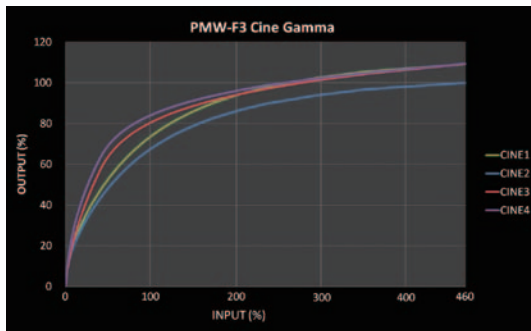
3. Built-in ND Filters

The PMW-F3 camcorder is equipped with built-in optical ND (Neutral Density) filters. These filters are selected via a built-in ND filter slide - Clear (Off), 1/8 ND (0.9), and 1/64 ND (1.8) - and conveniently enable operators to control light intensity without a matte box in small camera configuration.

4. Slow Shutter Function

The PMW-F3 offers a Slow Shutter function for capturing clearer images in low-light environments. This allows the shutter speed to be extended to a maximum of eight frames. The function not only increases camera sensitivity but also produces a special blurring effect when shooting a moving object, for enhanced shooting creativity. The shutter speed is selectable between 2- and 8-frame periods.

5. Interval Recording Function

The Interval Recording function intermittently records one frame at pre-determined intervals. This is convenient for shooting over long periods of time, and also when creating special effects with extremely rapid motion.

6. HD-SDI and Other Versatile Interfaces

The PMW-F3 comes equipped with a wide range of interfaces optimized for a variety of operational needs, broad interoperability, and flexible workflow. These include an HD-SDI output and, in E-to-E mode, an uncompressed 4:2:2 10-bit signal can be output from the connector. For versatile usage, there is also a down-converted SD-SDI output, i.LINK® (HDV/DVCAM), and analog composite/component output. In addition, the PMW-F3 has a timecode input/output and genlock input, allowing the camcorder to be used in a multi-camera system. Also, the PMW-F3 has an HD-SDI Dual-link output for 10bit 4:2:2 1080 50/59.94p as standard, and 10 bit RGB 4:4:4 1080 24/25/30p output as an option.

7. Supplied Software for Powerful Content Management

The newly developed XDCAM Browser version 1.1 not only enables users to browse video clips shot by the PMW-F3 on their Microsoft Windows® and Macintosh® computers, but also to register and edit metadata, and convert file wrappers if needed. In addition, with an optional charged base plug in from MainConcept AG*, you can also convert file format for example from 4:2:0 35Mbps to 4:2:2 50Mbps.

*http://www.mainconcept.com/plugin4xdcambrowser
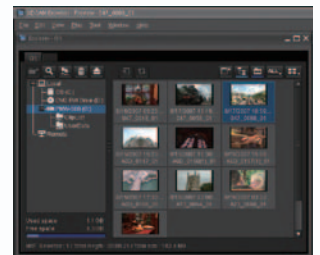
Exmor™ Super 35 CMOS Image Sensor

The PMW-F3 is equipped with a Super 35mm CMOS image sensor which is equivalent to that of Super 35mm film and has been specifically developed for digital cinematography. Its positioning within the chassis is exactly the same as it would be within a 35mm film camera - ensuring optical performance with the widest variety of 35mm cine lenses.

As shown below, Super 35mm Exmor CMOS sensor size itself is approximately 40% larger than that of a micro 4/3″ image sensor. Moreover, the actual size of each pixel on this Super 35mm image sensor is approximately 4 times larger than those typically found in Digital SLRs. These are the foundations that support the needs of professional shooters — greater sensitivity, exposure latitude, low noise, and motion smoothness along with shallower depth of field over Digital SLRs and other camcorders using smaller imager sensors.

The output signal from this new CMOS image sensor is processed in the newly developed high-quality camera signal processor inside the unit. By utilizing cutting-edge technology, this camcorder achieves very high sensitivity and an extremely low noise level. When video mode sensitivity is F11 (ISO800), the S/N ratio is 63 dB. When S-LOG mode sensitivity is F16 (ISO1600), with an 800% dynamic range, the S/N ratio is 57 dB.

As the Exmor Super 35 CMOS image sensor offers extremely high sensitivity, the ND filter is built-in for easier control of incoming light intensity. In addition, to minimize design size, ND filter glasses have an up/down slide mechanism.

Super 35mm Imager

27.1 mm
13.3 mm
23.6 mm
Exmor™ Super35 CMOS

Micro 4/3″ Imager

21.8 mm
13.3 mm
17.3 mm
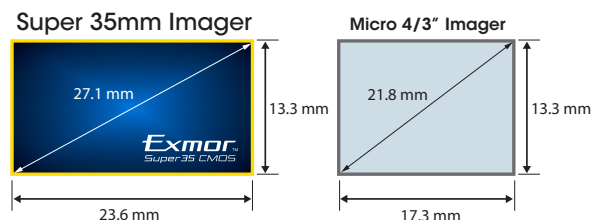
Three PL Lens Kits (35/50/85mm, T2.0)

To make a camera operator's entry into the 35mm world as easy and economical as possible, the affordable PMW-F3K model comes as standard with three PL lenses. These have fixed focal lengths of 35mm, 50mm, and 85mm with T2.0, and - as this type of lens doesn't support flange back adjustment - an adjustment mechanism is installed in the main body of the PMW-F3. These PL lenses meet the specifications both of traditional cinema lenses and of digital lenses.

• High resolution
• Well-controlled vignetting
• Low geometric distortion
• Minimized breathing
• Exit pupil position accommodates the characteristics of the image sensor
• Eight-blade iris diaphragm specification

This Super 35mm image sensor camcorder has a shallow depth of field. Its T2.0 lens achieves the same blur quality (bokeh) as T0.8 lens with camcorders which have a 2/3″ image sensor typically used for broadcasting.

Lens Interface & Mount

The PMW-F3 is supplied with a PL mount adapter to provide immediate compatibility with the widest range of 35mm cine lenses. There are hot-shoe electric interfaces for Cooke/i Technology and ARRI LDS on the PL mount adapter. This makes it possible to improve the workflow by bringing iris, focus, and other lens metadata into the post-production process. In the future, Sony plans to introduce zoom lenses* which are directly mounted to the PMW-F3 original lens mount. This newly developed type of power zoom lens will expand the operational flexibility of the PMW-F3 so it can be used for broader applications.
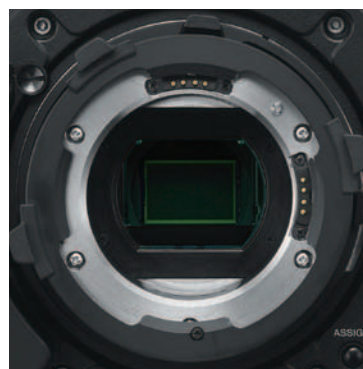
*Optional Zoom Lens availability expected Winter 2011. Dates of availability are subject to change without notice. Sony makes no guarantees as to future product offerings or release dates.

RGB & S-LOG Workflow*

The RGB and S-LOG output option (CBK-RGB01)* makes it possible to output a 10bit RGB 4:4:4 uncompressed 1080p signal over an HD-SDI Dual-link. Moreover by using same option, the Dual-link A output can be switched to 3G-SDI. 3G-SDI output reduces wiring between the camera and external recording and monitoring devices. This RGB output can be recorded with an external recording device such as the SRW-1 HDCAM-SR™ portable recorder. This feature allows users to capture higher picture quality especially for VFX including color grading, compositing and chroma key operation.

This option also offers S-LOG gamma output which enables users to capture in an extremely wide dynamic range of 800% with an S/N ratio of 57 dB. The advantage of S-LOG is the reproduction of both shadow details and highlight, contributing to "film-look" images.

The PMW-F3 has four viewing LUTs for monitoring purposes when S-LOG output is activated. For example, if the user selects S-LOG to R709 conversion LUT as the viewing LUT, R709-converted images are available in HD-SDI output, and the result is checked without color grading in the field. At the same time, LUT-applied images can be recorded on SxS card and can be used as off-line material for making EDL/ALE files. RGB output can be recorded on HDCAM-SR tapes and used as on-line material. By using both HDCAM-SR tapes and SxS cards, the PMW-F3 enables efficient post-production workflow.
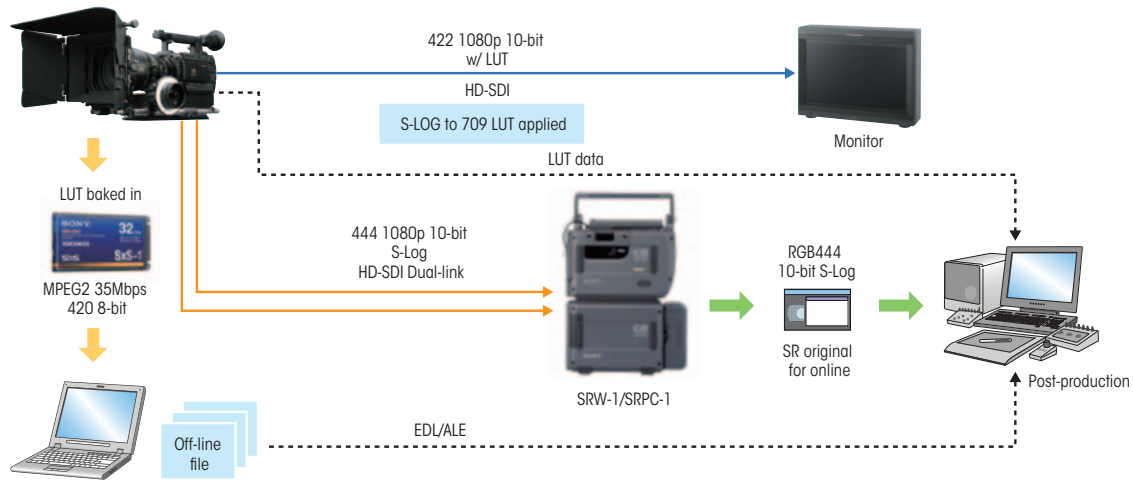
3D Shooting System*

The 3D-LINK option* enables users to operate two PMW-F3 cameras at the same time via one camera remote controller. Two PMW-F3 cameras can be connected with a dedicated 10-pin cable which carries a reference signal, timecode and control. Since two cameras are locked with

a genlock signal, it's easy to achieve 3D shooting without time-consuming adjustment, and the images captured by the two cameras are completely synchronized. In addition, by using the HD-SDI output signal for an HDCAM-SR recorder, both off-line material on SxS® card and on-line material on HDCAM-SR tapes can be used for efficient post-production.
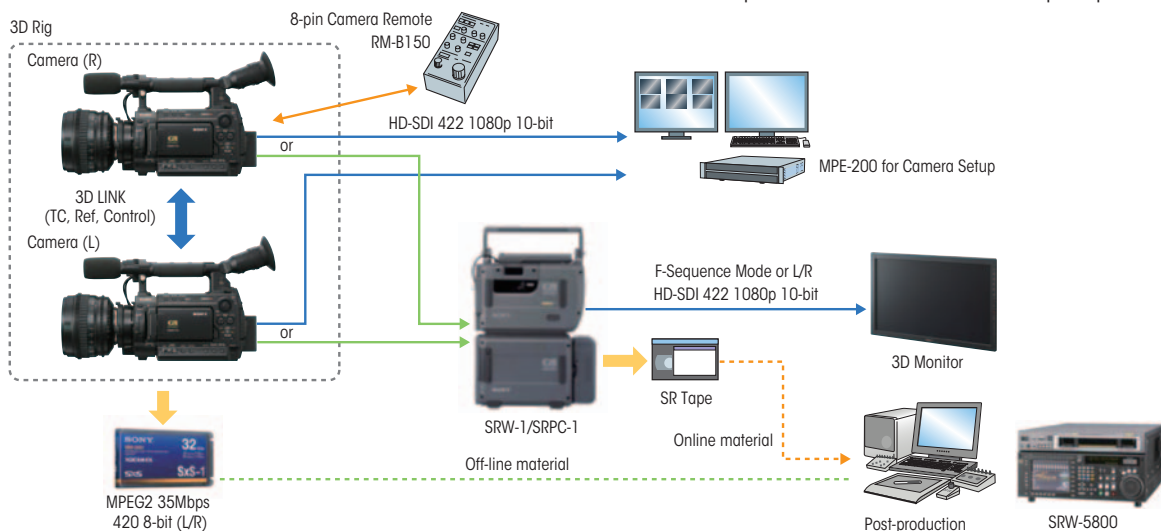
*Availability: CBK-RGB01 RGB & S-Log Output Software Option expected Summer 2011, CBK-3DL01 3D Link Software Option expected Fall 2011.
 Dates of availability are subject to change without notice. Sony makes no guarantees as to future product offerings or release dates.
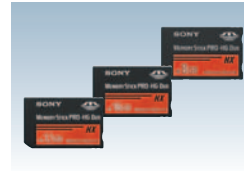
Optional Accessories for PMW-F3

SBP-32/16
SxS® PRO Memory Card

SBS-32G1A/64G1A
SxS Memory Card

MEAD-MS01
Media Adaptor for Memory Stick PRO-HG Duo "HX" Series

MS-HX8G, HX16G, HX32G
Memory Stick PRO-HG Duo™ "HX" Series

MEAD-SD01
Media Adaptor for San Disk Class 10 SDHC Memory Card

San Disk
Class 10 SDHC Card

PHU-120R
Professional Harddisk Unit

PXU-MS240
Mobile Storage Unit

PXU-HC240
HDD Cartridge (for PXU-MS240)

BP-U30
Lithiumion Battery Pack

BP-U60
Lithium-ion Battery Pack (56 Wh)

BC-U1
Battery Charger (for BP-U30/U60)

BC-U2
Battery Charger

SBAC-US10
SxS Memory Card USB Reader/Writer

RM-B150
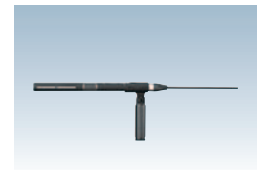Remote Control Unit

RM-B750
Remote Control Unit

AC-DN10
AC Adaptor

BC-L70
Two-channel Simultaneous Charger

ECM-673/9X
Shotgun Microphone

ECM-680S
Stereo Shotgun Microphone

UWP-V1
Lave Mic, Bodaypack TX and Portable RX Wireless System

CBK-RGB01 *
RGB & S-Log Output Software Option

CBK-3DL01 *
3D Link Software Option

*Availability: CBK-RGB01 RGB & S-Log Output Software Option expected Summer 2011, CBK-3DL01 3D Link Software Option expected Fall 2011.
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Lenses for PMW-F3

Carl Zeiss

Master Prime Lenses

Ultra Prime Lenses

Compact Prime Lenses

Light Weight Zoom LWZ-2

Cooke

S4/i Prime Lenses

5/i Prime Lenses

Panchro/i Series

S4/i CXX Wide Angle Zoom

Angenieux

Optimo DP 16-42 mm

Optimo DP 30-80 mm

Optimo 24-290 mm

Optimo 17-80 mm

Fujinon

HK3.1x14.5

HK4.7x18

HK7.5x24

HK5.3x75

Sony

SCL-P11X15
Wide Angle 1.5X Zoom Lens
(Summer 2011)*

High Power Zoom Lens
(Winter 2011)*

* Dates of availability are subject to change without notice. Sony makes no guarantees as to future product offerings or release dates.

Recording Format

| HD/SD | REC mode | Recording Resolution | Frame Rate | | | | | | | Audio Format | Recording Time (w/ 64GB SxS-1) |
| | | | NTSC mode | | | | PAL mode | | | | |
			59.94p	59.94i	29.97p	23.98p	50p	50i	25p		
HD	HQ 35 Mbps (VBR)	1920×1080	–	o	o	o	–	o	o	Linear PCM 16 bit/48 kHz 2 CH	Approx. 200 min
		1440×1080	–	o	o	o	–	o	o		
		1280×720	o	–	o	o	o	–	o		
	SP 25 Mbps (CBR)	1440×1080	–	o	–	x (59.94i REC)	–	o	–		Approx. 280 min
SD	DVCAM 25 Mbps (CBR)	720×480	–	o	x (29.97PsF)	–	–				Approx. 260 min
		720×576	–				–	o	o (25PsF)		

Output/ Input Combination List

HD/SD	Recording Format	SDI/HDMI™/i.LINK I/O Select	i.LINK output	SDI output	HDMI output	Video output	i.LINK input
HD	HQ 1920/ HQ 1440/ HQ 1280	HD SDI	–	HD	–	HD-Y	–
		SD SDI	–	SD	–	Composite	–
		HD HDMI	–	–	HD	HD-Y	–
		SD HDMI P	–	–	SD Progressive	–	–
		SD HDMI i	–	–	SD Interlace	Composite	–
		SD HDMI i & DVCAM	DVCAM	–	SD Interlace	Composite	DV (Display Only)
	SP 1440	HD SDI	–	HD	–	HD-Y	–
		SD SDI	–	SD	–	Composite	–
		HD HDMI & HDV	HDV	–	HD	HD-Y	HDV
		SD HDMI P & HDV	HDV	–	SD Progressive	–	HDV
		SD HDMI i & HDV	HDV	–	SD Interlace	Composite	HDV
		SD HDMI i & DVCAM	DVCAM	–	SD Interlace	Composite	DV (Display Only)
SD	DVCAM	HD SDI	–	–	–	–	–
		SD SDI	–	SD	–	Composite	–
		HD HDMI & HDV	–	–	–	–	–
		SD HDMI P & HDV	–	–	–	–	–
		SD HDMI i & HDV	–	–	–	–	–
		SD HDMI i & DVCAM	DVCAM	–	SD Interlace	Composite	DV (Display Only)

Specifications

General	
Dimension (W x H x D)	6 x 7 1/2 x 8 3/8 inches (151 x 189 x 210 mm) (PMW-F3L, without projection)
Weight	5 lb 4 oz (2.4 kg) (Camera only)
Power Requirements	DC 12 V (10.5 V to 17.0 V)
Power Consumption	Approx.24.0 W (Typical) (REC mode, HD-SDI Dual Link On, EVF On, LCD Monitor Off)
Operating Temperature	32°F to 104°F (0°C to 40°C)
Storage Temperature	-4°F to +140°F (-20°C to +60°C)
Continuous Operating Hours (with BP-U60)	Approx.130 Min (HD-SDI Dual Link On) Approx.170 Min (HD-SDI Dual Link Off)

Lens (included in PMW-F3K only)			
Focal Length	35mm	50mm	85mm
Aperture Value	T2.0 to Close	T2.0 to Close	T2.0 to Close
Minimum Shooting Distance	0.35m	0.5m	0.85m
Filter Diameter	95mm	95mm	95mm

Camera		
Image Sensor	Super 35mm Equivalent Single Chip Exmor CMOS Image Sensor	
Built-in Filter	OFF: Clear, 1: 1/8ND, 2: 1/64ND	
Sensitivity (2000 lux, Reflection ratio 89.9%, 1920 x 1080/59.94i)	F11 (Typical)	
S/N Ratio(1920 x 1080/59.94i)	63 dB (Typical)	
Lens Mount	PL mount (with supplied lens mount adapter)	
Shutter Speed	1/32 - 1/2000 sec	
Slow Shutter	2, 3, 4, 5, 6, 7, 8 frame accumulation	
Slow & Quick	720p	1 - 60 fps selectable (17- 60 fps when HD-SDI Dual Link is active)
	1080p	1 - 30 fps selectable (17- 30 fps when HD-SDI Dual Link is active)
White Balance	Preset, Memory A, Memory B/ATW	
Gain	-3, 0, 3, 6, 9, 12, 18 dB, AGC	
Gamma Curve	Standard Gamma x6, CINE Gamma x4, S-LOG Gamma (with RGB and S-LOG option)	

Input/Output	
HD/SD SDI OUT	BNC (x1) (HD-SDI/SD-SDI switchable)
HD-SDI Dual Link OUT	BNC (x2) 4: 2: 2 1080 50/59.94p 10 bit output
VIDEO OUT	BNC (x1) (HD-Y signal or Composite signal)
HDMI OUT	HDMI connector (Type A) (x1)
i.LINK IN/OUT	IEEE1394 S400 4-pin Connector (x1)
AUDIO IN	XLR Type 3-pin (female) (x2), LINE/MIC/MIC+48 V selectable
AUDIO OUT	RCA (x2)
GENLOCK IN	BNC (x1)
TC IN/OUT	BNC (x1 each)
DC IN	XLR type 4-pin (male) (x1)
REMOTE	8-pin (x1)
USB	Mini TypeB connector (x1)
PHONES	Stereo Mini Jack (x1)

Display	
View Finder	0.45 inch, Aspect Ratio 16: 9
LCD Monitor	3.5 inch, Aspect ratio 16: 9, Hybrid (semi-transmissive) type

Audio	
Built-in Speaker	Monoral

Media Slot	
Type	ExpressCard/34 (x2)
Interface	ExpressCard Compliant

Supplied Accessories	
	PL lens mount adapter, Stereo MIC, Windscreen, IR remote, Shoulder Strap, CD-ROM (XDCAM Browser, SxS device driver software, PDF version operation manual), Operational Manual, Warranty card, PL lens kit (PMW-F3K only)