

F5 CineAlta 4K truly gorgeous HD

[Super-sampling: Spectacular HD, 2K or 4K](#)
[4K/2K RAW options](#)
[Vast exposure latitude](#)
[Retaining maximum grayscale](#)
[Viewfinders as revolutionary as the camera](#)
[Modularity and versatility](#)
[Choice of recording formats](#)
[High speed: 240 fps](#)
[More than just a pretty interface](#)
[The connections you need](#)
[Long-life Olivine Battery](#)
[Sony's 4K universe](#)
[Sony cameras compared](#)
[Sony camera accessories](#)
[Connectivity, flexibility and longer cables](#)



[Authorized Resellers](#) [FD Times Special Report](#) [Interactive Menu Simulator](#) [4K Workflow Guide Ver2.0](#) [CineAlta 4K Brochure](#)

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For incredibly vivid HD, start with the 4K imager of the Sony F5. You'll get superior, super-sampled pictures with noticeably higher contrast, rich color reproduction and greater clarity. Building on the success of Sony's F3, the F5 offers robust internal recording modes, all with vibrant 4:2:2 color. Irresistible options include the amazing precision of 16-bit linear RAW 2K/4K recording and high speed 2K RAW at up to 240 fps without cropping. 2K High Frame Rate has arrived with the free v2.0 upgrade.

Super-sampling: Spectacular HD, 2K or 4K

Does a 4K camera make sense in an HD world? Perfect sense. Even if you're not planning on 4K production, the 11.6 total megapixels of Sony's 4K image sensor enable you to shoot gorgeous, super-sampled HD now and learn how to get the best from the camera. [read more](#)

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4K/2K RAW options

The ultimate camera capture system would record every nuance of light and shadow from the image sensor, preserving every detail from every pixel for full exploitation in post-production. If you want the maximum flexibility that 4K and 2K RAW deliver, Sony's optional AXS-R5 Access Memory System recorder is a remarkable choice. Unlike some RAW systems, Sony's 16-bit linear capture preserves more tonal values than the human eye can differentiate. This is also the ideal match for the 16-bit linear ACES workflow. For simplified creation of offline proxies, the camera even provides simultaneous onboard recording to SxS® cards using the same start frame and stop frame as the RAW recording. [read more](#)

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Vast exposure latitude

Cinematographers paint their images with light and shadow. So the ability to render tones from deepest shadows to brightest highlights is a crucial test of any digital camera. The F5 excels, with 14 stops of exposure latitude. DPs have noticed that the camera holds remarkable detail in the highlights, while noise in the blacks is extremely low. The result? Graceful rendering of scene contrast, even in searing sunlight. The camera is rated at ISO 2000 (S-Log 2 gamma, D55 light source) for superb results in available light.

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Retaining maximum grayscale

Given all the effort Sony made to achieve 14 stops of exposure latitude, it would be a crime to crush this latitude in recording. That's why Sony gives you a choice of grayscale encoding. [read more](#)

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Viewfinders as revolutionary as the camera

It's ironic that with focus so critical, most operators are stuck with viewfinders and on-camera monitors that offer middling contrast and resolution. Sony changes all that with the F5. A new digital interface has given rise to a brilliant new series of viewfinders. [read more](#)

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Modularity and versatility

Sony spent two years in close consultation with cinematographers and ACs. In particular, we focused on the ergonomics of handheld and shoulder-mounted shooting. The result is an ergonomic design unlike any previous Sony camera. It starts with a highly compact camera that builds up with modules to form an elegant, unified system. [read more](#)

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Choice of recording formats

While the F5 offers the option of glorious 16-bit 4K and 2K RAW recording using the outboard AXS-R5 recorder, not every production is prepared to take advantage. That's why the camera offers three internal recording formats ranging from 50 Mbps to 352 Mbps (at 24p). You can choose the codec, processing complexity and file size that match the needs of each project. [read more](#)

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High speed: 240 fps

From stunts and explosions to the fall of a single raindrop, F5 high-speed shooting is a powerful storytelling tool. The camera also performs Slow & Quick (S&Q) motion for overcranking and undercranking. This enables you to alter the narrative by speeding up or slowing down the action, choosing frame rates from 1 frame per second (fps) to the maximum in 1 fps increments. And with the F5, every high speed shooting, overcranking and undercranking mode delivers full quality. There's no sacrifice in bit depth and no "windowing" of the sensor. So there's no crop factor, no loss in angle of view. [read more](#)

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More than just a pretty interface

Carefully designed with significant input from cinematographers, the F5 provides an incredibly rich range of controls. And the interface is nicely intuitive. Instead of diving through menus, you get direct, one-touch access to key shooting parameters including frame rate, shutter speed, color temperature, ISO sensitivity and gamma. Assignable buttons mean that favorite adjustments are always at your fingertips. [read more](#)

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The connections you need

The camera offers powerful connections, including four HD-SDI outputs. There's also HDMI®, USB, DC in connection, a removable XLR audio module and a removable time code/genlock module. The XLR inputs accept balanced analog signals, provide 48-Volt phantom power and will accept four channels of AES/EBU digital audio with an expected free firmware upgrade. [read more](#)

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Long-life Olivine Battery

At Sony, we don't just know about cameras. We're also a leader in battery technology. The F5 takes advantage of Sony's innovative BP-FL75 battery pack, which uses Olivine—Lithium Iron Phosphate—instead of conventional Lithium Ion cathodes. The result is twice the number of charge-discharge cycles, compared to previous Sony batteries. [read more](#)

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Sony's 4K universe

Like high definition a decade ago, 4K is emerging as a consumer entertainment platform. And Sony is playing a pivotal role in this transition. When

we launched the world's first commercial 4K projectors in 2005, we had to explain that a "K" was 1024 horizontal pixels and that "4K" meant 4096 x 2160 resolution. We had to itemize the advantages with tutorials on resolution and seating distance. Today 4K is a robust production platform. It is enshrined in the Digital Cinema Initiatives (DCI) specification. The ITU and SMPTE have both issued 4K standards. And the Consumer Electronics Association has recently launched the term "Ultra High-Definition" (Ultra HD) to cover 4K consumer products. [read more](#)

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Sony cameras compared

	F65	PMW-F55	PMW-F5	PMW-F3	NEX-FS700R	NEX-FS100U
Sensor Size	24.7 x 13.1 mm	24 x 12.7 mm	24 x 12.7 mm	23.6 x 13.3 mm	24 x 12.7 mm (16:9 mode)	23.6 x 13.3 mm
Sensor Diagonal	28 mm	27.1 mm	27.1 mm	27.1 mm	27.1 mm (16:9 mode)	27.1 mm
Sensor Aspect Ratio	1.89:1 (17:9)	1.89:1 (17:9)	1.89:1 (17:9)	1.78:1 (16:9)	1.89:1 (17:9)	1.78:1 (16:9)
Sensor Resolution	8182 x 2160	4096 x 2160	4096 x 2160	2448 x 1377	4096 x 2160	2448 x 1377
Photosites Total	20 million	11.6 million	11.6 million	3.5 million	11.6 million	3.5 million
Photosites Effective	n/s	8.8 million (17:9)	8.8 million (17:9)	3.4 million (16:9)	8.8 million (17:9)	3.4 million (16:9)
Color Gamut	S-Gamut	S-Gamut	Wide	Wide	Wide	Wide
Lens Mount	PL	Sony FZ and supplied PL adaptor	Sony FZ and supplied PL adaptor	Sony FZ and supplied PL adaptor	Sony E-Mount	Sony E-Mount
Flange Focal Depth	52 mm	19 mm (FZ) 52 mm (PL)	19 mm (FZ) 52 mm (PL)	19 mm (FZ) 52 mm (PL)	18 mm	18 mm
Shutter	Rotary 11.2 to 180° Electronic 4.2 to 360°	Frame Image Scan 4.2 to 360°	Electronic 4.2 to 360°	Electronic 1/32 to 1/2000	Electronic 1/3 to 1/10000	Electronic 1/3 to 1/10000
Built in ND Filters	0, 0.9, 1.2, 1.5, 1.8 (0, 3, 4, 5, 6 stops)	0, 0.9, 1.8 (0, 3, 6 stops)	0, 0.9, 1.8 (0, 3, 6 stops)	0, 0.9, 1.8 (0, 3, 6 stops)	0, 0.6, 1.2, 1.8 (0, 2, 4, 6 stops)	-
Exposure Latitude	14 stops	14 stops	14 stops	12.5 stops	Over 12 stops (CineGamma 4)	n/s
Native ISO	800	1250 in S-Log 2	2000 in S-Log 2	1600 in S-Log	500 in Standard Gamma	500 in Standard Gamma
RAW Recording	With SR-R4	With AXS-R5	With AXS-R5	-	With AXS-R5 + HXR-IFR5	-
S-Log Recording	S-Log 2	S-Log 2	S-Log 2	S-Log	S-Log 2	-
Video Recording	Yes	Yes	Yes	Yes	Yes	Yes
8K Recording (bitrate at 24p)	• F65RAW-SQ, 16-bit, 2.0 Gbps with SR-R4 • F65RAW-Lite, 16-bit, 1.2 Gbps with SR-R4	-	-	-	-	-
4K Recording (bitrate at 24p)	-	• XAVC 4:2:2, 10-bit, 240 Mbps Internal (QFHD with v3.0 upgrade) • F55RAW, 16-bit, 960 Mbps with AXS-R5	F55RAW, 16-bit, 960 Mbps with AXS-R5	-	FS700RAW 12-bit payload, 960 Mbps with AXS-R5 + HXR-IF5	-
2K Recording (bitrate at 24p)	-	• XAVC 4:2:2, 10-bit, 90 Mbps Internal with v2.0 upgrade • F55RAW HFR, 16-bit, 240 Mbps with AXS-R5 and v2.0 upgrade	• XAVC 4:2:2, 10-bit, 90 Mbps Internal with v2.0 upgrade • F55RAW HFR, 16-bit, 240 Mbps with AXS-R5 and v2.0 upgrade	-	FS700RAW 12-bit payload, 240 Mbps with AXS-R5 + HXR-IF5	-
HD Recording (bitrate at 24p)	SR File, 12-bit or 10-bit, 4:4:4 or 4:2:2; 704, 352	• XAVC 4:2:2, 10-bit, 90 Mbps • SR File, 4:4:4 or 4:2:2, 10-bit, 352 or 176 Mbps with v1.2	• XAVC 4:2:2, 10-bit, 90 Mbps • SR File, 4:4:4 or 4:2:2, 10-bit, 352 or 176 Mbps with v1.2	• MPEG 4:2:0, 8 bit, 35 Mbps internal • SR File, 10-bit, 4:4:4 or 4:2:2; 176,	AVCHD 4:2:0, 8 bit, 24 or 28 Mbps,	AVCHD 4:2:0, 8 bit, 24 or 28 Mbps,

	or 176 Mbps with SR-R4	upgrade • MPEG 4:2:2, 8-bit, 50 Mbps • All internal	upgrade • MPEG 4:2:2, 8-bit, 50 Mbps • All internal	352 or 704 with SR-R1	internal	internal
Maximum Frames Per Second (progressive)	120 fps @ 4K RAW with SR-R4	• 240 fps @ 2K RAW with AXS-R5 and v2.0 upgrade • 180 fps @ 2K/HD XAVC with v3.0 upgrade	• 240 fps @ 2K RAW with AXS-R5 and v2.0 upgrade • 180 fps @ 2K/HD XAVC with v3.0 upgrade	• 60 fps @ 1080p with SR-R1 • 60 fps @ 720p internal • 30 fps @ 1080p internal	• 960 fps in Super Slow Motion • 240 fps 2K RAW continuous • 60 fps AVCHD codec continuous	60 fps continuous
Recording Media	SRMemory cards for SR-R4	• SxS-1, PRO, PRO+ cards (internal) • AXSM cards for AXS-R5	• SxS-1, PRO, PRO+ cards (internal) • AXSM cards for AXS-R5	• SxS-1, PRO cards (internal) • SRMemory cards for SR-R1	• SD, SDHC, SDXC or Memory Stick PRO Duo (internal) • AXSM cards for AXS-R5	SD, SDHC, SDXC or Memory Stick PRO Duo (internal)
HD Output	HD-SDI x2	• 3G-SDI x4 with 2K and 4K capability • HDMI 1.4a	• 3G-SDI x4 • HDMI 1.4a	• HD-SDI x2 • Dual Link HD-SDI • HDMI 1.4	• 3G-SDI with 2K and 4K capability • HDMI	• HD-SDI • HDMI 1.4
Batteries	V-mount	V-mount	V-mount	Sony BP Series	Sony L Series	Sony L Series
Dimensions (body only)	12 x 9-1/8 x 7-3/4 inches (305 x 227 x 195 mm)	7-1/8 x 7-7/8 x 12-1/4 inches (151 x 189 x 210 mm)	7-1/8 x 7-7/8 x 12-1/4 inches (151 x 189 x 210 mm)	6 x 7-1/2 x 8-3/8 inches (151 x 189 x 210 mm)	5-3/4 x 7 1/8 x 10 inches (145 x 179 x 254 mm)	5 x 4 x 7 5/8 inches (127 x 102 x 194 mm)
Weight (body only)	11 lb (5.0 kg)	4 lb 14 oz (2.2 kg)	4 lb 14 oz (2.2 kg)	5 lb 4 oz (2.4 kg)	3 lb 11 oz (1.7 kg)	2 lb 4oz (1.0 kg)
Power Consumption (typical)	Approx. 65 W	Approx. 25 W	Approx. 24 W	Approx. 24 W	Approx. 9.6 W	Approx. 5.6W

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