

## ALEXA Mini LF

### Main Features:

- Compact and lightweight camera
- Robust and reliable
- Large-format sensor for large-format look
- Super 35 recording modes for S35 lens compatibility
- 4.5K with ARRI's best overall image quality
- ARRIRAW or Apple ProRes recording
- Small Codex Compact Drives
- Three internal motorized FSND filters
- MVF-2 high-contrast HD viewfinder with flip-out monitor



### Technical Data:

Sensor Type	Large Format ARRI ALEV III (A2X) CMOS sensor with Bayer pattern color filter array	
Sensor Size	4448 x 3096 36.70 x 25.54 mm / 1.444 x 1.005" Ø 44.71 mm / 1.760"	
Photosite Pitch	8.25 µm	
Sensor Frame Rates	0.75 - 100 fps	
Sensor Active Image Area (photo sites)	ARRIRAW 4.5K LF 3:2 Open Gate - 4.5K:	4448 x 3096
	ARRIRAW 4.5K LF 2.39:1 - 4.5K:	4448 x 1856
	ARRIRAW 3.8K LF 16:9 - UHD:	3840 x 2160
	ARRIRAW 2.8K LF 1:1 - 2.8K:	2880 x 2880
	ARRIRAW 3.4K S35 3:2 - 3.4K:	3424 x 2202
	Apple ProRes 4.5K LF 3:2 Open Gate - 4.5K:	4448 x 3096
	Apple ProRes 4.5K LF 2.39:1 - 4.5K:	4448 x 1856
	Apple ProRes 4.3K LF 16:9 - UHD:	4320 x 2430
	Apple ProRes 4.3K LF 16:9 - HD:	4320 x 2430
	Apple ProRes 3.8K LF 16:9 - UHD:	3840 x 2160
	Apple ProRes 3.8K LF 16:9 - 2K:	3840 x 2160
	Apple ProRes 3.8K LF 16:9 - HD:	3840 x 2160
	Apple ProRes 2.8K LF 1:1 - 2.8K:	2880 x 2880
	Apple ProRes 3.2K S35 16:9 - 3.2K:	3200 x 1800
	Apple ProRes 2.8K S35 4:3 - 2.8K:	2880 x 2160
	Apple ProRes 2.8K S35 16:9 - HD:	2880 x 1620
Sensor Active Image Area (dimensions)	ARRIRAW 4.5K LF 3:2 Open Gate - 4.5K:	36.70 x 25.54 mm / 1.445 x 1.006"
	ARRIRAW 4.5K LF 2.39:1 - 4.5K:	36.70 x 15.31 mm / 1.445 x 0.603"
	ARRIRAW 3.8K LF 16:9 - UHD:	31.68 x 17.82 mm / 1.247 x 0.702"
	ARRIRAW 2.8K LF 1:1 - 2.8K:	23.76 x 23.76 mm / 0.935 x 0.935"
	ARRIRAW 3.4K S35 3:2 - 3.4K:	28.25 x 18.17 mm / 1.112 x 0.715"
	Apple ProRes 4.5K LF 3:2 Open Gate - 4.5K:	36.70 x 25.54 mm / 1.445 x 1.006"
	Apple ProRes 4.5K LF 2.39:1 - 4.5K:	36.70 x 15.31 mm / 1.445 x 0.603"
	Apple ProRes 4.3K LF 16:9 - UHD:	35.64 x 20.05 mm / 1.403 x 0.789"
	Apple ProRes 4.3K LF 16:9 - HD:	35.64 x 20.05 mm / 1.403 x 0.789"
	Apple ProRes 3.8K LF 16:9 - UHD:	31.68 x 17.82 mm / 1.247 x 0.702"
	Apple ProRes 3.8K LF 16:9 - 2K:	31.68 x 17.82 mm / 1.247 x 0.702"
	Apple ProRes 3.8K LF 16:9 - HD:	31.68 x 17.82 mm / 1.247 x 0.702"
	Apple ProRes 2.8K LF 1:1 - 2.8K:	23.76 x 23.76 mm / 0.935 x 0.935"
	Apple ProRes 3.2K S35 16:9 - 3.2K:	26.40 x 14.85 mm / 1.039 x 0.585"
	Apple ProRes 2.8K S35 4:3 - 2.8K:	23.76 x 17.82 mm / 0.935 x 0.702"
	Apple ProRes 2.8K S35 16:9 - HD:	23.76 x 13.37 mm / 0.935 x 0.526"
Recording File Container Size (pixels)	ARRIRAW 4.5K LF 3:2 Open Gate - 4.5K:	4448 x 3096
	ARRIRAW 4.5K LF 2.39:1 - 4.5K:	4448 x 1856
	ARRIRAW 3.8K LF 16:9 - UHD:	3840 x 2160
	ARRIRAW 2.8K LF 1:1 - 2.8K:	2880 x 2880
	ARRIRAW 3.4K S35 3:2 - 3.4K:	3424 x 2202
	Apple ProRes 4.5K LF 3:2 Open Gate - 4.5K:	4480 x 3096
	Apple ProRes 4.5K LF 2.39:1 - 4.5K:	4480 x 1856
	Apple ProRes 4.3K LF 16:9 - UHD:	3840 x 2160
	Apple ProRes 4.3K LF 16:9 - HD:	1920 x 1080
	Apple ProRes 3.8K LF 16:9 - UHD:	3840 x 2160
	Apple ProRes 3.8K LF 16:9 - 2K:	2048 x 1152
	Apple ProRes 3.8K LF 16:9 - HD:	1920 x 1080
	Apple ProRes 2.8K LF 1:1 - 2.8K:	3072 x 2880
	Apple ProRes 3.2K S35 16:9 - 3.2K:	3200 x 1800
	Apple ProRes 2.8K S35 4:3 - 2.8K:	2880 x 2160
	Apple ProRes 2.8K S35 16:9 - HD:	1920 x 1080

## ALEXA Mini LF

## Technical Data:

Recording File Image Content (pixels)	ARRIRAW 4.5K LF 3:2 Open Gate - 4.5K: 4448 x 3096 ARRIRAW 4.5K LF 2.39:1 - 4.5K: 4448 x 1856 ARRIRAW 3.8K LF 16:9 - UHD: 3840 x 2160 ARRIRAW 2.8K LF 1:1 - 2.8K: 2880 x 2880 ARRIRAW 3.4K S35 3:2 - 3.4K: 3424 x 2202 Apple ProRes 4.5K LF 3:2 Open Gate - 4.5K: 4448 x 3096 Apple ProRes 4.5K LF 2.39:1 - 4.5K: 4448 x 1856 Apple ProRes 4.3K LF 16:9 - UHD: 3840 x 2160 Apple ProRes 4.3K LF 16:9 - HD: 1920 x 1080 Apple ProRes 3.8K LF 16:9 - UHD: 3840 x 2160 Apple ProRes 3.8K LF 16:9 - 2K: 2048 x 1152 Apple ProRes 3.8K LF 16:9 - HD: 1920 x 1080 Apple ProRes 2.8K LF 1:1 - 2.8K: 2880 x 2880 Apple ProRes 3.2K S35 16:9 - 3.2K: 3200 x 1800 Apple ProRes 2.8K S35 4:3 - 2.8K: 2880 x 2160 Apple ProRes 2.8K S35 16:9 - HD: 1920 x 1080
Exposure Latitude	14+ stops over the entire sensitivity range from EI 160 to EI 3200 as measured with the ARRI Dynamic Range Test Chart (DRTC-1)
Exposure Index	Adjustable from EI 160-3200 in 1/3 stops, EI 800 base sensitivity
Shutter	Electronic shutter, 5.0°- 356° or 1s - 1/8000s
Recording Formats	MXF/ARRIRAW MXF/Apple ProRes 4444 XQ MXF/Apple ProRes 4444 MXF/Apple ProRes 422 HQ
Recording Media	Codex Compact Drives
Recording Frame Rates	ARRIRAW 4.5K LF 3:2 Open Gate - 4.5K: 0.75 - 40 fps ARRIRAW 4.5K LF 2.39:1 - 4.5K: 0.75 - 60 fps ARRIRAW 3.8K LF 16:9 - UHD: 0.75 - 60 fps ARRIRAW 2.8K LF 1:1 - 2.8K: 0.75 - 60 fps ARRIRAW 3.4K S35 3:2 - 3.4K: 0.75 - 60 fps Apple ProRes 4.5K LF 3:2 Open Gate - 4.5K: 0.75 - 40 fps Apple ProRes 4.5K LF 2.39:1 - 4.5K: 0.75 - 60 fps Apple ProRes 4.3K LF 16:9 - UHD: 0.75 - 48 fps Apple ProRes 4.3K LF 16:9 - HD: 0.75 - 75 fps Apple ProRes 3.8K LF 16:9 - UHD: 0.75 - 60 fps Apple ProRes 3.8K LF 16:9 - 2K: 0.75 - 90 fps Apple ProRes 3.8K LF 16:9 - HD: 0.75 - 90 fps Apple ProRes 2.8K LF 1:1 - 2.8K: 0.75 - 60 fps Apple ProRes 3.2K S35 16:9 - 3.2K: 0.75 - 75 fps Apple ProRes 2.8K S35 4:3 - 2.8K: 0.75 - 75 fps Apple ProRes 2.8K S35 16:9 - HD: 0.75 - 100 fps
Recording Modes	Standard real-time recording, no Pre-recording, no Intervalometer
Viewfinder Type	Multi Viewfinder MVF-2 with 4" flip-out monitor
Viewfinder Technology	OLED viewfinder display, LCD fold out monitor
Viewfinder Resolution (pixel)	1920 x 1080
Viewfinder Diopter	Adjustable from -5 to +5 diopters
Color Output	Rec 709, Rec 2020, Log C, Custom Look (ARRI Look File ALF-2)
Look Control	Import of custom 3D LUT ASC CDL parameters (slope, offset, power, saturation)
White Balance	Manual and auto white balance, adjustable from 2000K to 11000K in 10K steps Color correction adjustable range from -16 to +16 CC 1 CC corresponds to 035 Kodak CC values or 1/8 Rosco values
Filters	Built-in motorized ND filters 0.6, 1.2, 1.8, fixed optical low pass, UV, IR filter
Image Outputs	1x proprietary signal output for MVF-2 viewfinder on VF CoaXPress connector (video, audio, power control signals) SDI 1: -HD only, Processed or Clean, with or without a look file applied -1.5G 422 HD (SMPTE ST292-1, up to 30 fps, progressive (p) or progressive segmented frame (psf)) -3G 422 HD (SMPTE ST425-1, up to 60 fps, p) -3G 444 HD (SMPTE ST425-3, up to 30 fps, p) SDI 2: -HD or UHD, Clean only, with or without a look file applied, or SDI 1 clone -1.5G 422 HD (SMPTE ST292-1, up to 30 fps, p or psf) -3G 422 HD (SMPTE ST425-1, up to 60 fps, p) -3G 444 HD (SMPTE ST425-3, up to 30 fps, p) -6G 422 UHD (SMPTE ST2081-10, up to 30 fps, p)  "Clean" is an image without surround view or overlays (status, false color, zebra, framelines, etc.) "Processed" is an image with surround view or overlays.
Lens Squeeze Factor	1.00, 1.25, 1.30, 1.50, 1.65, 1.80, 2.00
Exposure and Focus Tools	False Color, Zebra, Zoom, Aperture and Color Peaking

## ALEXA Mini LF

## Technical Data:

Audio Input	1x LEMO 6pin balanced stereo line in with 12V power output (Line input max. level +24dBu correlating to 0dBFS)
Audio Output	SDI (embedded) 3,5 mm stereo headphone jack (on MVF-2)
Audio Recording	2 channel linear PCM, 24 bit 48 kHz
Remote Control Options	MVF-2 viewfinder can act as wired remote control with 10m/33ft cable Web-based remote control from smart phones, tablets and laptops via WiFi & Ethernet (beta version) Camera Access Protocol (CAP) via Ethernet & WiFi GPIO interface for integration with custom control interfaces WCU-4 hand-unit with control over lens motors and operational parameters via built-in white radio SXU-1 hand-unit with control over one lens channel OCU-1 and Master Grip control of lens and user buttons
Interfaces	1x LEMO 5pin LTC Timecode In/Out 1x LEMO 10pin Ethernet for remote control and service 1x BNC SYNC IN 1x LEMO 7pin EXT multi purpose accessory interface w. RS pin and 24V power output 1x LEMO 4pin LBUS (on lens mount) for lens motors, daisy chainable 1x USB 2.0 in media bay (for user setups, look files etc)
Wireless Interface	Built-in WiFi module (IEEE 802.11b/g) Built-in White Radio for ARRI lens and camera remote control
Lens Mount	ARRI LPL Mount (LBUS) ARRI PL-to-LPL adapter ARRI EF Mount (LBUS) Leitz M mount (available from Leitz)
Flange Focal Depth	LPL mount: 44 mm, with PL-to-LPL adapter: 52 mm
Power Input	1x LEMO 8pin (11-34 V DC)
Power Consumption	Around 65 W when recording ARRIRAW at 24 fps with MVF-2 attached (preliminary information)
Power Outputs	1x Fischer 3pin 24V RS 1x LEMO 2pin 12V 1x LEMO 7pin EXT 24V power output
Measurements (HxWxL)	140 x 143 x 188 mm / 5.5 x 5.6 x 7.4" (camera body with LPL lens mount)
Weight	~2.6 kg / ~5.7 lbs (camera body with LPL lens mount) 800 g (MVF-2)
Operating Temperature	-20° C to +45° C / -4° F to +113° F @ 95% relative humidity max, non condensing, splash and dust proof through sealed electronics
Storage Temperature	-30° C to +70° C / -22° F to +158° F
Sound Level	< 20 dB(A) at 24fps