

ALEXA Mini - Technical Data



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Product	ALEXA Mini
Camera type	35 mm format film-style digital camera with lightweight and compact carbon body, switchable active sensor area, support for ARRI MVF-1 viewfinder, built-in remote control capabilities via ARRI Electronic Control System and Wi-Fi, support for cforce motors, built-in motorized ND filters, interchangeable lens mounts and ARRI Lens Data System as well as Lens Data Archive.
Dimensions	Length: 185 mm/7.3" Width: 125 mm/4.9" Height: 140 mm/5.5" (camera body with PL lens mount) Click here for dimensional drawings
Weight	~ 2.3 kg/5 lbs (camera body with titanium PL lens mount)
Sensor	35 mm format ARRI ALEV III CMOS with Bayer pattern color filter array
Active photo sites (with surround view)	S16 HD: 1600 x 900 (1760 x 980) HD: 2880 x 1620 (3168 x 1772) 2K: 2868 x 1612 (3154 x 1764) 3.2K: 3200 x 1800 (3424 x 1926) 4K UHD: 3200 x 1800 (3424 x 1926) 4:3 2.8K: 2880 x 2160 (3168 x 2160)

	2.39:1 2K Ana.: 2560 x 2145 (3424 x 2202) HD Ana.: 1920 x 2160 (3424 x 2202) Open Gate 3.4K: 3424 x 2202 (3424 x 2202)
Shutter	Electronic shutter, 5.0° to 356.0°
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	EI 800 base sensitivity
Filters	Built-in motorized ND filters 0.6, 1.2, 2.1
Lens mounts	Titanium PL mount with L-Bus connector and LDS EF mount PL mount with Hirose connector and LDS B4 mount with Hirose connector(A)
Recording media	CFast 2.0 memory cards
Recording formats	ProRes: S16 HD: 1920 x 1080 (up-sampled from 1600 x 900) HD: 1920 x 1080 2K Cine 16:9: 2048 x 1152 3.2K: 3200 x 1800 4K UHD: 3840 x 2160 (up-sampled from 3.2K) 4:3 2.8K: 2880 x 2160 (padded to 2944 x 2160) Anamorphic ProRes formats with 2x in-camera de-squeeze: HD Anamorphic: 1920 x 1080* 2.39:1 2K Anamorphic: 2048 x 858* MXF/ARRIRAW (in-camera recording to MXF-wrapped ARRIRAW files): 2.8K 16:9: 2880 x 1620** Open Gate: 3424 x 2202*** MXF/ARRIRAW Open Gate modes with active image area matching 4:3 ProRes modes: 4:3 2.8K (OG 3.4K): 2880 x 2160 (Recording in Open Gate 3.4K)*** 2.39:1 Ana. (OG 3.4K): 2560 x 2145 (Recording in Open Gate 3.4K)*** 16:9 HD Ana. (OG 3.4K): 1920 x 2160 (Recording in Open Gate 3.4K)*** *) requires ALEXA Mini 4:3 License Key, **) requires ALEXA Mini ARRIRAW License Key, ***) requires both ALEXA Mini 4:3 and ARRIRAW Licenses Keys Click here for a drawing with details about the recording areas, surround views and framelines
Recording codec	ProRes 4444XQ, 4444, 422 (HQ), 422, 422(LT), MXF/ARRIRAW
Recording frame rates	16:9 ProRes HD 0.75 - 200 fps ProRes S16 HD 0.75 - 200 fps ProRes 2K 0.75 - 200 fps

ProRes 3.2K 0.75 - 60 fps ProRes UHD
0.75 - 60 fps MFX/ARRIRAW 16:9 2.8K
0.75 - 48 fps

4:3

ProRes 4:3 2.8K 0.75 - 50 fps

6:5*

ProRes 2:39:1 2K Ana. 0.75 - 120 fps

8:9**

ProRes HD Ana. 0.75 - 120 fps

Open Gate

MFX/ARRIRAW 3.4K Open Gate 0.75 - 30 fps

* 4:3 cropped

** Center crop from anamorphic

(1) Minimum frame rate is always 0.75 fps

(2) The „recording resolution“ determines the number of horizontal pixels that will be recorded (the number of vertical pixels is dependent on the recording file type and sensor mode)

Maximum Frame Rates for ALEXA Mini

ARRI

Recording Format				Maximum Frame Rate in fps <
Sensor Mode	Recording File Type	Recording Resolution >	Recording File Setting	Internal Recording CFast 2.0 128 GB
16:9	ProRes	HD, S16 HD	422 / 422 HQ	200
			4444	200
			4444 XQ	120
			422 / 422 HQ	200
		21<	4444	200
			4444 XQ	120
			422 / 422 HQ	60
			4444	60
		3.21<	4444 XQ	30
			422 / 422 HQ	60
			4444	60
			4444 XQ	30
		UHD	422 / 422 HQ	60
			4444	60
			4444 XQ	30
	MFXIARRIRAW	16:9 2.81<		48
4:3	ProRes	4:3 2.81<	422 / 422 HQ	50
			4444	50
			4444 XQ	50
6:5*	ProRes	2:39:1 21< Ana .	422 / 422 HQ	120
			4444	120
			4444 XQ	120
8:9**	ProRes	HD Ana.	422 / 422 HQ	120
			4444	120
			4444 XQ	120
Open Gate	MFXIARRIRAW	3.41< Open Gate		30

* 4:3 cropped

** Center crop from anamorphic

(1) Minimum frame rate is always 0.75 fps

(2) The „recording resolution“ determines the number of horizontal pixels that will be recorded
(the number of vertical pixels is dependent on the recording file type and sensor mode)

Color output

Rec 709, custom look or Log C

Look control

Import of custom 3D LUT, ASC COL parameter (slope, offset, power, saturation)

Adjustable image parameters

Knee, gamma, saturation, black gamma, saturation by hue

Focus and exposure control	Peaking, zebra, false color, waveform
White balance	Manual and auto white balance
Sound level	< 20 dB(A) at standard frame rates
Environmental	'-20° C to +45° C (-4° F to +113° F) @ 95% humidity max, non-condensing splash and dust-proof through sealed electronics
Viewfinder	Multi Viewfinder MVF-1 (OLED and LCD) with flip-out LCD screen and military-grade connector to camera Camera Control Panel (CCP-1) LCD control panel with option to daisy-chain MVF-1
Control interface	Soft buttons and OSD on SDI output, integration of Transvideo Starlite HD5-ARRI touch interface WCU-4 hand-unit with control over operational parameters.
ARRI lens motor control	Built-in white coded radio interface for ARRI lens and camera remote control LBUS motor output for daisy-chainable cforce lens control motors Lens Data Archive
Wi-Fi remote control	Built-in Wi-Fi interface and web-based remote control from phones, tablets and laptops
Custom control	Optional GPIO interface for integration with custom control interfaces
Power input	Lemo 8-pin, 10.5-34 V DC
Video outputs	2x HD-SDI out 1.5G and 3G: uncompressed HD video with embedded audio and metadata, 6G SDI in UHD and 3.2K recording modes.
Inputs	SDI-Genlock (optional activation through ARRI Service), Timecode (in and output)
Other interfaces	USB 2.0 (for user sets, looks etc.) Ethernet for service and web remote control EXT accessory interface w. RS pin and unregulated power output (outputs battery voltage)