

Technical Data



Model

ALEXA LF

Sensor Type Large Format ARRI ALEV III (A2X) CMOS sensor with Bayer pattern color filter array

Sensor Maximum Number of Photosites and Size 4448 x 3096
36.70 x 25.54 mm / 1.444 x 1.005"
ø 44.71 mm / 1.760"

Sensor Frame Rates 0.75 - 150 fps

Weight ~7.8 kg / ~17.2 lbs
(camera body with LPL lens mount)

Photosite Pitch 8.25 µm

Sensor Active Image Area (photosites) LF Open Gate ProRes 4.5K: 4448 x 3096
LF Open Gate ARRIRAW 4.5K: 4448 x 3096
LF 16:9 ProRes HD: 3840 x 2160
LF 16:9 ProRes 2K: 3840 x 2160
LF 16:9 ProRes UHD: 3840 x 2160
LF 16:9 ARRIRAW UHD: 3840 x 2160
LF 2.39:1 ProRes 4.5K: 4448 x 1856
LF 2.39:1 ARRIRAW 4.5K: 4448 x 1856

Sensor Active Image Area (dimensions) LF Open Gate ProRes 4.5K: 36.70 x 25.54 mm / 1.445 x 1.006"
LF Open Gate ARRIRAW 4.5K: 36.70 x 25.54 mm / 1.445 x 1.006"
LF 16:9 ProRes HD: 31.68 x 17.82 mm / 1.247 x 0.702"
LF 16:9 ProRes 2K: 31.68 x 17.82 mm / 1.247 x 0.702"
LF 16:9 ProRes UHD: 31.68 x 17.82 mm / 1.247 x 0.702"
LF 16:9 ARRIRAW UHD: 31.68 x 17.82 mm / 1.247 x 0.702"
LF 2.39:1 ProRes 4.5K: 36.70 x 15.31 mm / 1.445 x 0.603"
LF 2.39:1 ARRIRAW 4.5K: 36.70 x 15.31 mm / 1.445 x 0.603"

Recording File Container Size (pixel) LF Open Gate ProRes 4.5K: 4480 x 3096
LF Open Gate ARRIRAW 4.5K: 4448 x 3096
LF 16:9 ProRes HD: 1920 x 1080
LF 16:9 ProRes 2K: 2048 x 1152
LF 16:9 ProRes UHD: 3840 x 2160
LF 16:9 ARRIRAW UHD: 3840 x 2160
LF 2.39:1 ProRes 4.5K: 4480 x 1856
LF 2.39:1 ARRIRAW 4.5K: 4448 x 1856

Recording File Image Content (pixel) LF Open Gate ProRes 4.5K: 4448 x 3096
LF Open Gate ARRIRAW 4.5K: 4448 x 3096
LF 16:9 ProRes HD: 1920 x 1080
LF 16:9 ProRes 2K: 2048 x 1152
LF 16:9 ProRes UHD: 3840 x 2160
LF 16:9 ARRIRAW UHD: 3840 x 2160
LF 2.39:1 ProRes 4.5K: 4448 x 1856
LF 2.39:1 ARRIRAW 4.5K: 4448 x 1856

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° - 358°
Recording Formats	ARRIRAW (.ari) Apple ProRes 4444 XQ Apple ProRes 4444 Apple ProRes 422 HQ Apple ProRes 422
Recording Media	SXR Capture Drives SxS PRO+ Cards
Recording Frame Rates	LF Open Gate ProRes 4.5K: 0.75 - 60 fps LF Open Gate ARRIRAW 4.5K: 0.75 - 90 fps LF 16:9 ProRes HD: 0.75 - 60 fps LF 16:9 ProRes 2K: 0.75 - 60 fps LF 16:9 ProRes UHD: 0.75 - 60 fps LF 16:9 ARRIRAW UHD: 0.75 - 90 fps LF 2.39:1 ProRes 4.5K: 0.75 - 100 fps LF 2.39:1 ARRIRAW 4.5K: 0.75 - 150 fps
Recording Modes	Standard real-time recording No Pre-recording No Intervalometer
Viewfinder Type	Electronic Viewfinder EVF-1 with 235 eyepiece Electronic Viewfinder EVF-2 with ARRICAM eyepiece
Viewfinder Technology	EVF-1: F-LCOS viewfinder display EVF-2: OLED viewfinder display
Viewfinder Resolution (pixel)	EVF-1: 1280 x 784 EVF-2: 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 100K steps Color correction adjustable range from -12 to +12 CC 1 CC corresponds to 035 Kodak CC values or 1/8 Rosco values



Filters	Manual behind the lens FSND filters: Optical Clear, 0.3, 0.6, 0.9, 1.2, 1.5, 1.8, 2.1, 2.4 Fixed optical low pass, UV, IR filter
Image Outputs	1x proprietary signal output for EVF-1/EVF-2 viewfinder 4x MON OUT: 1,5G (SMPTE ST292-1) and 6G (SMPTE ST2081-10) uncompressed HD video with embedded audio and metadata,
Lens Squeeze Factors	1.00 1.25 1.30 1.50 1.65 1.80 2.00
Exposure and Focus Tools	False Color Peaking Zoom
Audio Input	1x XLR 5pin balanced stereo line in (Line input max. level +24dBu correlating to 0dBFS)
Audio Output	3,5mm stereo headphone jack SDI (embedded)
Audio Recording	2 channel linear PCM, 24 bit 48 kHz
Remote Control Options	Web-based remote control from phones, tablets and laptops via WiFi & Ethernet WCU-4 hand-unit with control over lens motors and operational parameters via built-in white radio Remote Control Unit RCU-4 via Ethernet
Interfaces	1x LEMO 5pin LTC Timecode In/Out 1x BNC SDI Return In 1x LEMO 16pin EXT for accessories and sync 1x LEMO 10pin Ethernet for remote control and sync 1x SD Card (for user setups, look files etc) 3x Fischer 12pin connectors for CLM lens motors 2x Fischer 5pin LCS Lens Control System connectors for hand units
Wireless Interfaces	Built-in WiFi module (IEEE 802.11b/g) Built-in White Radio for ARRI lens and camera remote control Built-in Wireless Video System: 1920 x 1080, range 600m (2,000 ft) line of sight, OFDM (Orthogonal Frequency-Division Multiplexing) Bandwidth 40MHz, latency < 1ms
Lens Mounts	LPL lens mount PL lens mount
Flange Focal Depth	LPL mount: 44 mm PL mount: 52 mm



Flange Focal Depth	LPL mount: 44 mm PL mount: 52 mm
Power Input	1x Fischer 2pin BAT connector (18.5-34 V DC) 1x On-board battery interface (19.5-34 V DC)
Power Consumption	ca. 120 W (recording ProRes 4444 at 24 fps in LF 16:9 sensor mode onto an SxS PRO+ 256 GB card with EVF-1 and wireless video on but without accessories) ca. 160 W (recording ARRIRAW at 90 fps in LF Open Gate sensor mode onto an SXR Capture Drive 2 TB with EVF-1 and wireless video on but without accessories)
Power Outputs	4x Fischer 3pin 24V RS 1x LEMO 2pin 12V
Power Management	Active ORing between BAT connector and on-board battery adapters
Measurements (HxWxL)	158 x 201 x 351 mm / 6.22 x 7.91 x 14.33" (camera body with LPL lens mount)
Operating Temperature	-20° C to +45° C / -4° F to +113° F @ 95% relative humidity max, non condensing
Storage Temperature	-30° C to +70° C / -22° F to +158° F
Sound Level	< 20 dB(A) at 24fps