ARRI ALEXA is an extraordinary 35 format film-style digital camera system designed for the motion picture and broadcast markets, consisting of four cameras and an extensive range of primes, zooms, accessories and recording solutions. Currently available are the original ALEXA and the ALEXA Plus, which adds support for the ARRI Wireless Remote System, cmotion evolution lens control system, ARRI Lens Data System and expanded metadata. These cameras will be joined by the ALEXA M, a modular system with a separate camera head for 3D applications and lightweight camera configurations and the ALEXA Studio, the only digital motion picture camera with an optical viewfinder and a 4:3 sensor.

All ALEXA cameras offer exceptional image quality with the organic look and feel of film; their unequalled exposure latitude, high sensitivity and unique ARRI color processing provide sharp and natural images for 2K and HD with a cinematic look of breathtaking richness and detail.

Making them the perfect tools for a wide range of workflow and budget requirements, ALEXA cameras can simultaneously output a number of formats, all with audio and metadata. Their ability to record Apple ProRes images to on-board SxS PRO cards offers file-based workflows of unparalleled efficiency for immediate time and cost savings. ARRIRAW delivers the pinnacle in image quality and postproduction flexibility, while the HD-SDI outputs integrate seamlessly into existing HD infrastructures.

Based on over 90 years of experience in building equipment for the motion picture industry, ALEXAs are true ARRI cameras: simple to operate, ergonomic in design and reliable in even the most extreme environments. ALEXA cameras are designed around the way you work and, like all other ARRI products, are backed by the global ARRI service network.

To provide more choices to the filmmaker, the ALEXA system is based on an open architecture with many industry-standard interfaces and compatibility with third party products. This, in combination with a number of components on the camera that can be upgraded, makes the system future-proof.

More than just hardware, ALEXA cameras represent an entire image pipeline that stands alone as the most complete and powerful digital production system ever built.

**Main Features**

### Exceptional Image Performance

- Film-like, organic look
  - extended, clean highlights
  - extremely low noise floor
  - natural skin tones
  - excellent color separation
  - cinematic depth of field
- Wide exposure latitude of 14 stops over the entire EI range
- EI 800 base sensitivity (EI 160 to EI 3200)
- Sharp, natural images for 2K and HD

### Efficient and Versatile Workflows

- Multiple output options
  - ProRes, ARRIRAW and HD-SDI
  - Log C, Rec 709 or DCI P3
  - ARRI Look Files for custom looks
  - audio recording
  - integrated rich metadata
- Apple ProRes
  - on-board file-based recording
  - onto SxS PRO cards
  - all five Apple ProRes codecs
  - same codec as FCP uses: Shoot > Edit
- ARRIRAW
  - best format for 2K deliverables
  - best quality for VFX productions
  - greatest flexibility in post
  - best option for archiving
- HD-SDI
  - integrates into existing HD infrastructures
  - configurable HD-SDI outputs

### ARRI Product Quality

- Rugged and reliable
- Simple and safe operation
- Well balanced, ergonomic design
- Precision sync for 3D
- Powerful assistive displays, including
  - surround view
  - false color exposure check
  - peaking focus check
  - compare stored image with live image
  - electronic level
  - RETURN IN video
  - optional anamorphic de-squeeze
- Compatible with existing accessories
- Worldwide ARRI service network

### Open, Future-proof Architecture

- Compatibility with industry standards
  - PL mount lenses
  - HD-SDI, ProRes, SxS PRO cards
  - Gold mount or V-lock on-board batteries
  - 12 or 24 V power inputs and outputs
  - support for cmotion lens control systems
  - support for cmotion evolution lens control systems
  - support for ARRIRAW by third party post tools
- Numerous upgrade options
  - upgradeable Storage Interface Module
  - upgradeable Electronics Interface Module
  - Exchangeable Lens Mount (ELM)
  - easy and powerful free software updates
  - new features through purchase of license

### Further Resources & Online Tools

ALEXA – Technical Data

Camera Type
35 format film-style digital camera with integrated shoulder
arch and receptacles for 15 mm lightweight rods.

Sensor
35 format ALEV III CMOS with Dual Gain Architecture (DDA)
and Bayer pattern color filter array. 1.5x oversampling
for 1920 x 1080 output. 1.781 (69%) sensor area used for image out.

Frame Rates
ProRes 422 (Proxy), 422 (LT), 422, 422 and 422 (HQ) 0.75 - 60 fps;
ProRes 444 0.75 - 60 fps; HD-SDI: 0.75 - 60 fps;
ARRI RAW: 0.75 - 30 fps, all speeds adjustable with
1/1000 fps precision

Shutter
Electronic rolling shutter, adjustable from 5.0° to 350.0° with
1/10 degree precision.

Exposure Latitude
14 stops for all sensitivity settings from EI 160 to EI 3200, as measured
with the ARRI Dynamic Range Test Chart (DRTC)

White Balance
Separate red/blue and green/magenta balance available through Auto White Balance
or manual setting. Red/blue: 2000 to 11000 Kelvin, adjustable in
100 K steps, with presets of 3200 (tungsten), 3200 (fluorescent), 5600 (daylight), 7000 (daylight cool). Green/magenta: 8 to +8 color correction (CC),
1 CCI = 0.35 Kodak CC values or 1/8 Rosco values.

Sound Level
Under 20 DB(A) at +30° Celsius (+86° Fahrenheit) with lens attached and fan mode set to ‘Regular’, measured 1 m/3 feet from the image plane.
Silent operation at higher temperatures possible with fan mode set to ‘Rec low’

Power In
Three inputs: BAT connector, battery adapter back and battery adapter back. All accept 10.5 to 34 V DC. BS P power draw for camera and EVF-1 in
standard use recording to SxS PRO cards, without accessories.

Power Out
12V connector: limited to 12 V, up to 2.2A. RS, EXT and ETHERNET: input below 24V is regulated up to 24V, above 24V: input = output voltage.
Both RS and EXT connectors combine to up to 2.2A. Maximum power draw is also limited by the power source.

Weight
ALEXA camera body + SxS Module: 6.3 Kg/13.8 lbs

ALEXAnoD camera body + SxS Module + EVF-1 + Viewfinder Mounting Bracket VMB-2 + viewfinder cable + Center Camera Handle CCH-1: 7.7 Kg/16.9 lbs

Dimensions
Length: 332 mm/12.95”, width: 153 mm/6.02”, height: 158 mm/6.22”

Environmental
-20° C to +45° C (-4° F to +113° F) @ 95% humidity max, non condensing. Splash and dust proof through sealed electronics. System cooling through
radiator/single fan.

Flange Focal Depth
52.00 mm nominal

Viewfinder
Low latency (1 frame delay) electronic color viewfinder ARRI EVF-1 with 1280 x 784 F-LCD micro display (image: 1280 x 720, status bars: 1280 x
above 1280 and 320 below image) and ARRI LED illumination, both temperature controlled. Image can be flipped for use of viewfinder on camera left
or right. Viewfinder Mounting Bracket allows movement of viewfinder forward/backwards, left/right, up/down, 360 degree rotation and placement
on camera left or right.

Assistant Displays
On EVF-1 and MON OUT: frame lines, surround view, camera status, false color exposure check, peak finding check, compare stored image with live
image, RETURN IN video and optional anamorphic de-squeeze.

Control
Camera right: main user interface with 3” transflective 400 x 240 pixel LCD color screen, illuminated buttons and jog wheel. Camera left: operator
interface with illuminated buttons and card swap button. EVF-1: viewfinder and basic camera settings, ZOOM button (2.58 pixel to pixel magnification),
EXP button (false color exposure check) and jog wheel.

In-camera Recording
Apple QuickTime/ProRes 444, 422 (HD), 422, 422 (LT) or 422 (Proxy) 1080p. mov files with embedded audio, timecode and metadata, recording to
SxS PRO cards. ProRes 4444 is RGB 12 bit, all others YCC/10 bit; all legal range. Minimum recording times on a 32 GB card at 24 fps: Proress 4444 -
15 minutes, Prores 422 (HQ) - 19 minutes.

Recording Outputs
2x REC OUT BNC connectors for uncompressed ARRI RAW or uncompressed HD-SDI video. Both with embedded audio, timecode and metadata.
ARRI RAW: 2880 x 1620, 12 bit log signal without white balance or exposure index logic applied. HD-SDI video: 1920 x 1080 4:4:4 RGB or 4:2:2 YCbCr;
all legal or extended range. Minimum recording times on a 32 GB card at 24 fps: Prores 4444 - 15 minutes, Prores 422 (HQ) - 19 minutes.

Monitor Output
1x MON OUT BNC connector for uncompressed HD-SDI video: 1920 x 1080, 4:2:2 YCbCr; legal range.

Color Processing
For EVF-1, ProRes, REC OUT and MON OUT: Log C (film matrix off), Log C (film matrix on), REC 709 or DCI P3.

Synchronization
Master/Slave mode for sync precision of sensor, processing and HD-SDI signals and REC OUT signals and on the headphones jack.

Playback
QuickTime clips can be played back from SxS PRO cards to the EVF-1, MON OUT and REC OUT. Playback audio is available embedded in the MON OUT
and REC OUT signals and on the headphones jack.

Processing
16 bit linear image processing

Audio
1x XLR 5 pin AUDIO IN connector for 2 channel, line level balanced audio input, 24 bit/48 kHz A/D conversion, works at 23.976, 24, 25, 29.97 and 30 fps.
Audio is recorded uncompressed into the QuickTime/ProRes files and embedded uncompressed in all HD-SDI outputs, including ARRIRAW T-Link. Max of
2.5 dBm output from AUDIO OUT headphone outputs.

Connectors
2x slots for SxS PRO cards (SxS)
2x BNC recording out HD-SDI: 1.5G/3G (REC OUT 1 and REC OUT 2)
1x BNC monitoring out HD-SDI: 1.5G (MON OUT)
1x XLR 5 pin audio IN (AUDIO IN)
1x BNC return signal out to HD-SDI: 1.5G (RET/SYS NC IN)
1x XIMO 16 pin external accessory interface (EXT)
1x Fischer 2 pin 24 V power out (24 V)

SD Card
For importing ALEXA Look Files, camera setup files, frame line files and feature licenses. Stores captured stills in ARRIRRAW (.ari, 12 bit), TIFF (.tif, 16 bit),
DPX (.dpx, 10 bit) and JPEG (.jpg, 8 bit) format as well as log files. Also used for software updates.

Upgrades
The Storage Interface Module (currently available for SxS PRO cards) can be exchanged for future storage modules. The Electronics Interface Module
(also available as either ALEXA or ALEXA Plus versions) can be exchanged for future control electronics. Exchangeable Lens Mount (ELM) allows
other lenses beyond PL mount lenses to be used. Simple camera software updates. Licenses available for purchase. Anamorphic de-squeeze.

ALEXA Plus – Technical Data

Same as ALEXA, but with built-in support for the ARRI Wireless Remote System, motion evolution lens control system and ARRI LDS Lens Data System
(including Lens Data Mount and Lens Data Archive). Exchangeable lens for lenses without built-in LDS). Also has an additional MON OUT, one additional RS,
two LCS, one LDD and three lens motor connectors, built-in motion sensors and Quick Switch BNC connectors.

Weight
ALEXA Plus camera body + SxS Module: 7.0 Kg/15.4 lbs

ALEXA Plus camera body + SxS Module + EVF-1 + Viewfinder Mounting Bracket VMB-2 + viewfinder cable + Center Camera Handle CCH-1: 8.4 Kg/18.5 lbs

Dimensions
Length: 332 mm/12.95”, width: 153 mm/6.02”, height: 158 mm/6.22”

Lens Mount
ARRI Exchangeable Lens Mount (ELM); ships with Lens Adapter PL Mount with LDS contacts (LA-PL-2), 54 mm stainless steel PL mount, Super 35
centered.

Assistant Displays
On EVF-1 and MON OUT: electronic level.

Synchronization
Automated sync of lens settings for 3D applications in Master/Slave mode.

SD Card
For importing custom lens tables for the Lens Data Archive.

Note: All technical data based on Software Update Package (SUP) 4.0. All data subject to change without notice.