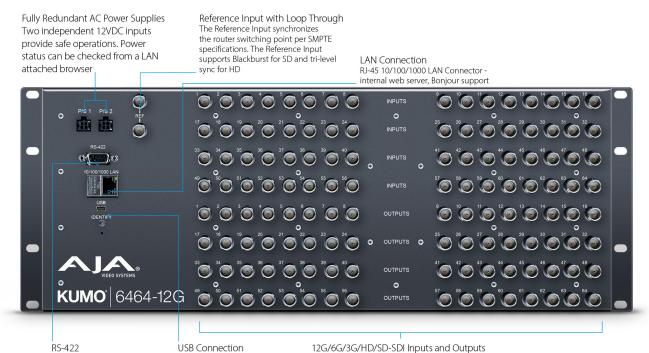# KUMO 6464-12G

KUMO 6464-12G offers increased capacity for larger configurations while maintaining a compact 4RU profile with support for 12G-SDI/6G-SDI/3G-SDI/1.5G-SDI with 64x 12G-SDI inputs and 64x 12G-SDI outputs.

KUMO 12G-SDI routers support large format resolutions, high frame rate (HFR) and deep color formats while reducing cable runs when transporting 4K/UltraHD over a single SDI link. Multi-link gang control also offers routing of up to 8K resolutions. The router offers network-based and physical control using KUMO CP and CP2 and mirrors the physical form of AJA's production-proven KUMO 6464 router, with a USB port for configuring IP addresses via AJA's free eMini-Setup software.

Built to the same quality standards as all AJA KUMO products, KUMO 6464-12G is the ideal choice for any situation where a balance of size, performance and capacity are critical such as post facilities and mobile trucks.

https://www.aja.com/products/kumo-6464-12g

Fully Redundant AC Power Supplies
Two independent 12VDC inputs provide safe operations. Power status can be checked from a LAN attached browser

Reference Input with Loop Through
The Reference Input synchronizes the router switching point per SMPTE specifications. The Reference Input supports Blackburst for SD and tri-level sync for HD

LAN Connection
RJ-45 10/100/1000 LAN Connector - internal web server, Bonjour support

RS-422
RS-422 remote control via 9-pin D-connector with basic support for Grass Valley Native Protocol support

USB Connection
USB port to easily configure the router IP address and simplify network configurations

12G/6G/3G/HD/SD-SDI Inputs and Outputs
All inputs and outputs, 12G/6G/3G/HD/SD-SDI (SMPTE-259/292/424/2081/2082)

Video Format

- 270 Mbps, 1.5 Gbps, 3 Gbps, 6 Gbps, 12 Gbps SDI
- 270 Mbps DVB-ASI
- Format agnostic, 270 Mbps - 12 Gbps

Video Input Digital

- 12G-SDI Inputs
- 64x 12G-SDI BNC, SMPTE-259/292/424/2081/2082

Video Output Digital

- 12G-SDI Outputs
- 64x 12G-SDI BNC, SMPTE-259/292/424/2081/2082
- Noninverting

Ancillary Data

- Passes all SDI embedded ancillary data including audio

Salvo

- Up to 8 Salvos can be configured and saved in each KUMO router

Cable Equalization

(Belden 1694A)
- 12Gbps, up to 50m
- 6Gbps, up to 90m
- 3Gbps, up to 180m
- 1.5Gbps, up to 210m
- 270Mbps, up to 390m
- Automatic operation

Reclocking

- 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.967 Gbps, 2.970 Gbps, 5.934 Gbps, 5.940 Gbps, 11.868 Gbps, 11.880 Gbps - Auto Select
- All other rates are passed through and not reclocked

Switching Modes

- Single, Dual, and Quad link modes
- Switches in vertical blanking per SMPTE RP-168

Control Panel Compatibility

- AJA KUMO CP (First 32 I/O in Normal, all I/O in Dual or Quad mode) – 1RU X-Y Ethernet control panel
- AJA KUMO CP2 (Single, Dual or Quad mode) – 2RU X-Y Ethernet control panel

Reference Input

- External, 2x BNC
- Looping, nonterminating
- Blackburst or tri-level sync

Network Interface

- 1x RJ-45, 10/100/1000 Ethernet
- Supports AJA KUMO Ethernet control panels, direct connect or networked
- Basic support for Grass Valley Native Protocol
- Embedded web server for remote control

USB Interface

- 1x Mini-USB for IP configuration using AJA eMini-Setup

Serial Interface

- 1x DB-9 Female, RS-422
- Basic support for Grass Valley Native Protocol
- 9-pin D-connector pinout is as follows:

1	GND
2	TX-
3	RX+
4	GND
5	No Connection
6	GND
7	TX+
8	RX-
9	GND
Shell	GND

Size (w x d x h)

- 4RU - 17.4" x 1.55" x 7.00" (441.96 x 39.37 x 177.8 mm)

Weight

- 9.2 lbs (4.2 kg)

Power

- 10-14VDC regulated, 64W typ, 72W max, power supply required, included with purchase
- AC Adapter: 100-240VAC, 50/60 Hz, universal input

Environment

- Safe Operating Temperature: 0 to 40 C (32 to 104 F)
- Safe Storage Temperature (Power OFF): -40 to 60 C (-40 to 140 F)
- Operating Relative Humidity: 10-90% noncondensing
- Operating Altitude: <3,000 meters (<10,000 feet)