

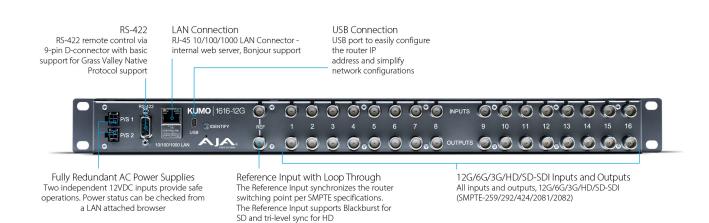


# KUMO 1616-12G

KUMO 1616-12G offers increased capacity for larger configurations while maintaining a compact 1RU profile with support for 12G-SDI/6G-SDI/3G-SDI/1.5G-SDI with 16x 12G-SDI inputs and 16x 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 SDI. The routers offer network-based and/or physical control, and mirror the physical form of AJA's production-proven KUMO 3232 and KUMO 1616 routers, with a new USB port for configuring IP addresses via AJA's eMini-Setup software. Built to the same quality standards as all AJA KUMO products, KUMO 1616-12G is the ideal choice for any situation where a balance of size and capacity are critical such as mid-sized post facilities and mobile trucks.

https://www.aja.com/products/kumo-1616-12g





### 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
- 16x 12G-SDI BNC, SMPTE-259/292/424/2081/2082

# Video Output Digital

- 12G-SDI Outputs
- 16x 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)

- 12 Gbps, up to 55m
- 6 Gbps, up to 110m
- 3 Gbps, up to 185m
- 1.5 Gbps, up to 210m
- 270 Mbps, up to 405m
- 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 1RU X-Y Ethernet control panel
- AJA KUMO CP2 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 $(w \times d \times h)$

• 1RU - 17.4" x 1.54" x 1.75" (441.96 x 39.12 x 44.45 mm)

# Weight

• 1.4 lb (0.7 kg)

#### Power

- 10-14VDC regulated, 15W typ, 17W typ, 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)