



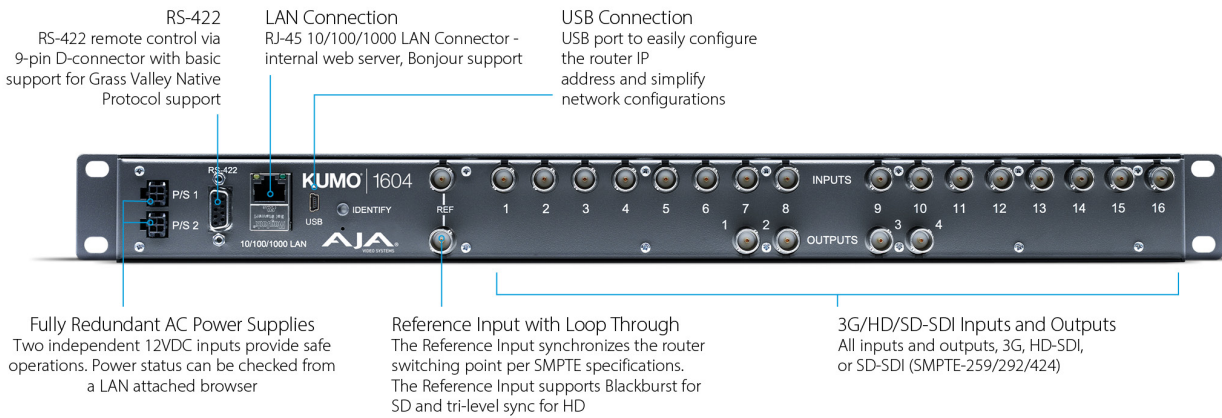
# KUMO 1604

KUMO 1604 is the right size for typical AV setups or corporate meetings with 16x 3G-SDI inputs and four 3G-SDI outputs when several different cameras, computers or other video devices need to be routed to a few monitors or projectors.

\$1,599 US MSRP

KUMO 1604 is now discontinued. Please visit <https://www.aja.com/family/routers> for alternative solutions.

<https://www.aja.com/products/kumo-1604>



## Video Formats

- 270 Mbps, 1.5 Gbps, 3 Gbps SDI
- 270 Mbps DVB-ASI

## Video Input Digital

- 3G-SDI Inputs
- 16x BNC, SMPTE-259/292/424

## Video Output Digital

- 3G-SDI Outputs
- 4x BNC, SMPTE-259/292/424

- 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)

- 3 Gbps, up to 140m
- 1.5 Gbps, up to 200m
- 270 Mbps, up to 390m
- Automatic operation

## Reclocking

- 270 Mbps, 1.483 Gbps, 1.485 Gbps, 2.966 Gbps, 2.970 Gbps - Auto Select

## Switching Modes

- Single/Normal, 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
- 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)

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

## Weight

- 1.2 lb (0.6 kg)

## Power

- External power supply required
  - Enclosure: Dual, redundant, 10-14VDC regulated, 4-pin Molex, 7W typical, 9.6W max.
  - AC adapter, included: 100-240VAC, 50/60 Hz, universal input, 60W
  - Optional redundant AC adapter sold separately, KUMO-PWR

## 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)