



# UHD-12G Digital Routing Switcher

World's First Enterprise-Class, Single-Link 12G Router for Today's Full-Bandwidth UHD TV Signal Transport



Delivering UHD TV Content  
Just Got a Lot Easier

## The First Single-Link Router for UHD TV

The demand for UHD content is exploding, and enterprise broadcasters are challenged to keep up. They need solutions *today* that can leverage their existing SDI signal infrastructure to transport real-time, full-bandwidth 4K UHD TV video signals. And they need more than a traditional 3G router, which can only process 4K signals through multiple paths.



**At Utah Scientific, we get that** – and it's why we designed the all-new UHD-12G digital routing switcher. The UHD-12G is the industry's first enterprise-class router to receive, route, and distribute the full range of SDI video signals over a single-link interconnect.

**144 x 144 Router** Small footprint 4 RU  
Low power consumption

Here's a router that can handle data rates from SD up to 2160p60 and everything in between, over the same industry-standard coax cabling on which you've always depended. That means simplified installations for signal transport that take up less rack space, need fewer cables to process 4K signals, and reduce operating expenses.

### Key features and benefits

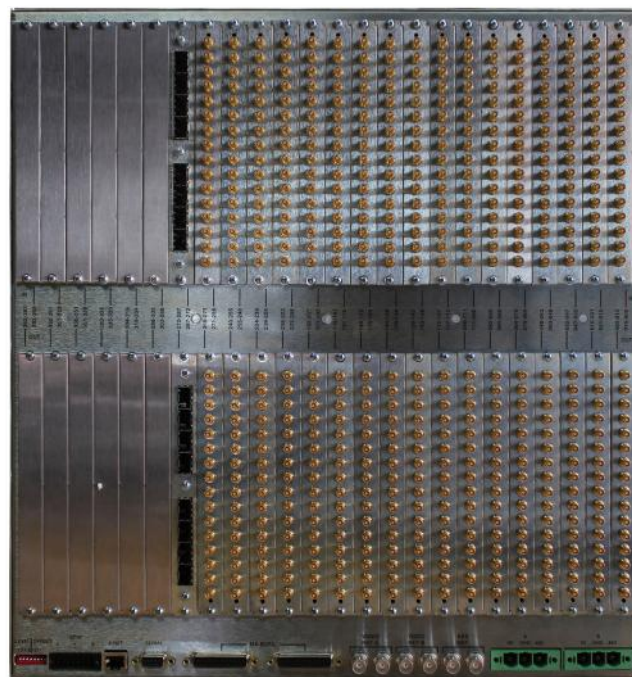
- Single-link interconnect for 4K-resolution signals
- Uses existing SDI network for simplified installations
- Distributes full range of SDI video up to 2160p60
- Supports SMPTE ST 2081 and ST 2082 standards
- Comes in enterprise-class frame configurations: 32 x 32, 144 x 144, and 288 x 288
- Is fully compatible with routing control systems including the SC-4, SC-40, and SC-400

Perfect for live UHDTV content acquisition, the UHD-12G is fully compliant with SMPTE standards for SDI video. It works seamlessly with the full line of Utah Scientific products including previous-generation SDI routers – further protecting your facility’s investment. Also, the UHD-12G can be controlled by any of our current routing control systems.



**32 x 32 Router** Small footprint 1 RU  
Low power consumption

And of course, the UHD-12G is backed by Utah Scientific’s four-decade track record of delivering the industry’s finest router switching technology. Utah Scientific is still the only manufacturer to offer a 10-year warranty as standard along with no-fee customer support.



**288 x 288 Router** Small footprint 8 RU  
Low power consumption

# I/O Module Specifications

## Multi-Rate Digital Input Card

Number of ports per card: 16  
Formats supported: From 18 Mbps up to 12 Gbps  
Connector Type: HD-BNC

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## Multi-Rate Digital Output Card

Number of ports per card: 16  
Formats supported: From 18 Mbps up to 12 Gbps  
Reclocking: All SDI rates up to 12 Gbps  
Connector Type: HD-BNC

Conforms to SMPTE 259C, 292, 424, 2081-1 and 2082-1

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## Frame Specifications

Width: 19" Rack Mount  
Sizes: 1 RU – Capacity: 32 inputs, 32 outputs  
Power Consumption: <30W  
Depth: 3.5"  
  
4 RU - Capacity: 144 inputs, 144 outputs  
Power Consumption: <50W  
Depth: 3.5"  
  
8 RU – Capacity: 288 inputs, 288 outputs  
Power Consumption: <100W  
Depth: 7"

## Digital Video Specifications

Jitter conforms to SMPTE 259, 292, 424, 2081-1, 2082-1  
  
Reclocked data rates 270 Mbps, 1485 Mbps, 2970 Mbps, 5.94 Gbps, and 11.88 Gbps  
  
Input return loss < -15 dB to 1.5 Ghz, -10dB to 3Ghz, -7dB to 6Ghz, -5dB to 12Ghz  
  
Output return loss < -15 dB to 1.5 Ghz, -10dB to 3Ghz, -7dB to 6Ghz, -5dB to 12Ghz  
  
Input EQ level  
  
Belden 1694A cable > 300 M @ 270 Mbps  
> 150 M @ 1.485 Gbps  
> 100 M @ 2.970 Gbps  
> 50 M @ 11.8 Gbps

Specifications are subject to change without notice

**Warranty**  
**10-year limited warranty, 24/7 service**

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