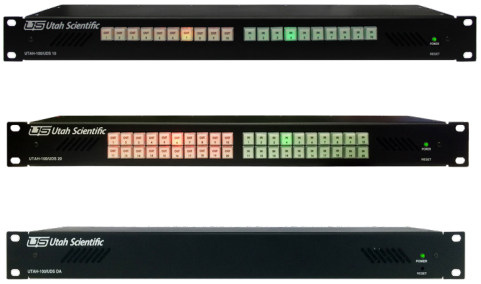
Utah Scientific

National Park Service Photo

# UDS Compact Series



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# UDS Compact Series

Since 1977, Utah Scientific has been an industry leader with world class signal routing and processing.

The UDS compact Series is ideal for small applications. The series consists of SDI 8x32 configurable distribution amplifier, SDI 10x10, as well as 20x20 routers.

With our Line of Compact UDS routers and configureable distribution amplifiers we have created a quality line of products designed for small-scale operations. Sitting at 1RU, nothing has been compromised in terms of functionality, feature or durability. Our Compact Series is designed first and foremost to provide mission critical routing and distribution. The size of our Compact Series also makes them ideal for virtually any application or environment including:

- **Broadcast**
- **Mobile Trucks**
- **Flypacks**
- **Production**
- **Post Production**
- **Rental Houses**
- **Corporate installations**

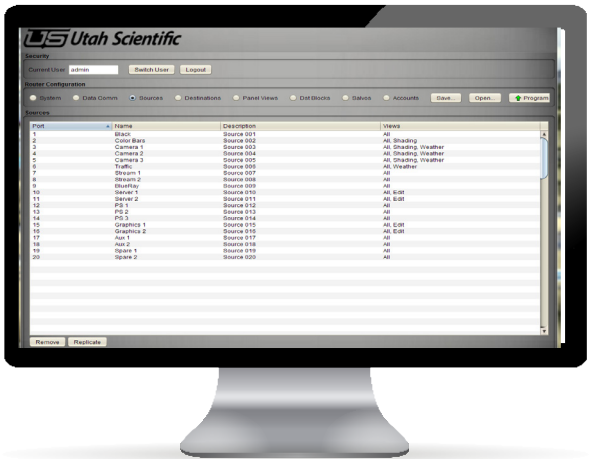
Facility integration for automation or third-party device control is easily accomplished using our industry standard Utah Scientific RCP-1 Serial and RCP-3 Ethernet protocols. All Products come with a standard inline power supply and the option to add a redundant power supply if required as well. The Compact series supports all current broadcast signal formats (SDI, HD-SDI, 3g SDI, DVB-ASI) with 4k Dual or Quad Link for multiple input and output configurations.

Signal equalization and reclocking with automatic reclocking bypass for non-standard formats is included in all products. All SDI routers include a local control panel for fast, simple operation, using dual-color illuminated buttons for convenient router source and destination labeling.

## Compact Series

Two optional router control panels are available forusers who desire additional hardware control: CPButton Control Panel and XY Full Matrix Display Control Panel.

Optional iPad™ tablet control app is also available with an easy to use control panel that automatically syncs to your router configuration. The Pro version gives you full editing features to customize your control panel to fit the way you work.



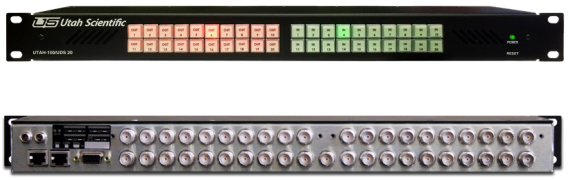

The UDS Compact Series includes a native internal web server which requires no additional software downloads and operates on standard web browsers. This value added software provides users with powerful features not traditionally available on compact routers.

- **Naming of sources and destinations**
- **Password protection for login and user rights**
- **Custom user views for sources and destinations**
- **Salvos for storing multiple tasks**
- **Macros for recalling tasks on user PC**
- **Destination blocks for grouping as DA's**
- **User selectable skins for background and logo**
- **Lock and protect outputs**
- **Logging status of control activity**
- **Destination reset mode**
- **Destination all mode to select all destinations**
- **Direct take or preset mode**
- **Color-coded sources for easy identification**

## Compact series

### UDS 10

SDI 10 input by 10 output router.

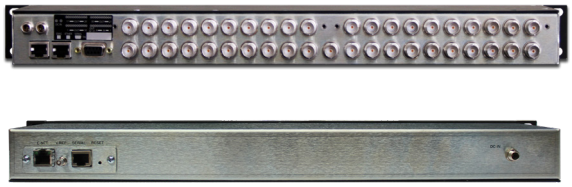


### UDS 20

SDI 20 input by 20 output router.

### UDS DA

Distribution amplifier with 8 configurable input ports and 32 output ports.



### UDS CP2

Optional button control Hardware panel.

### UDS XY

Optional full-matrix control hardware panel.

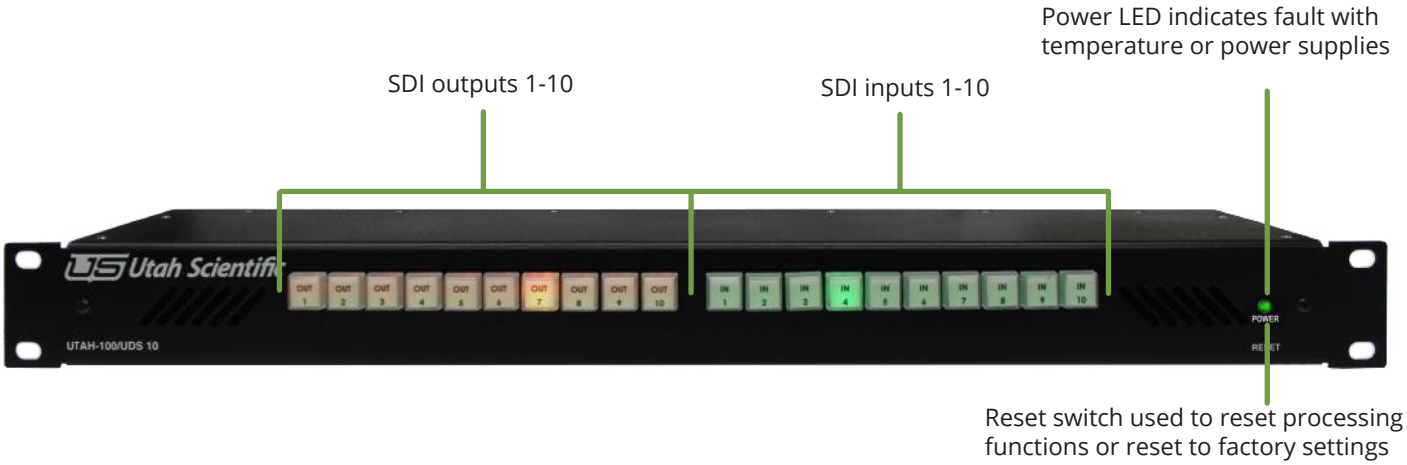
### UDS GPIO

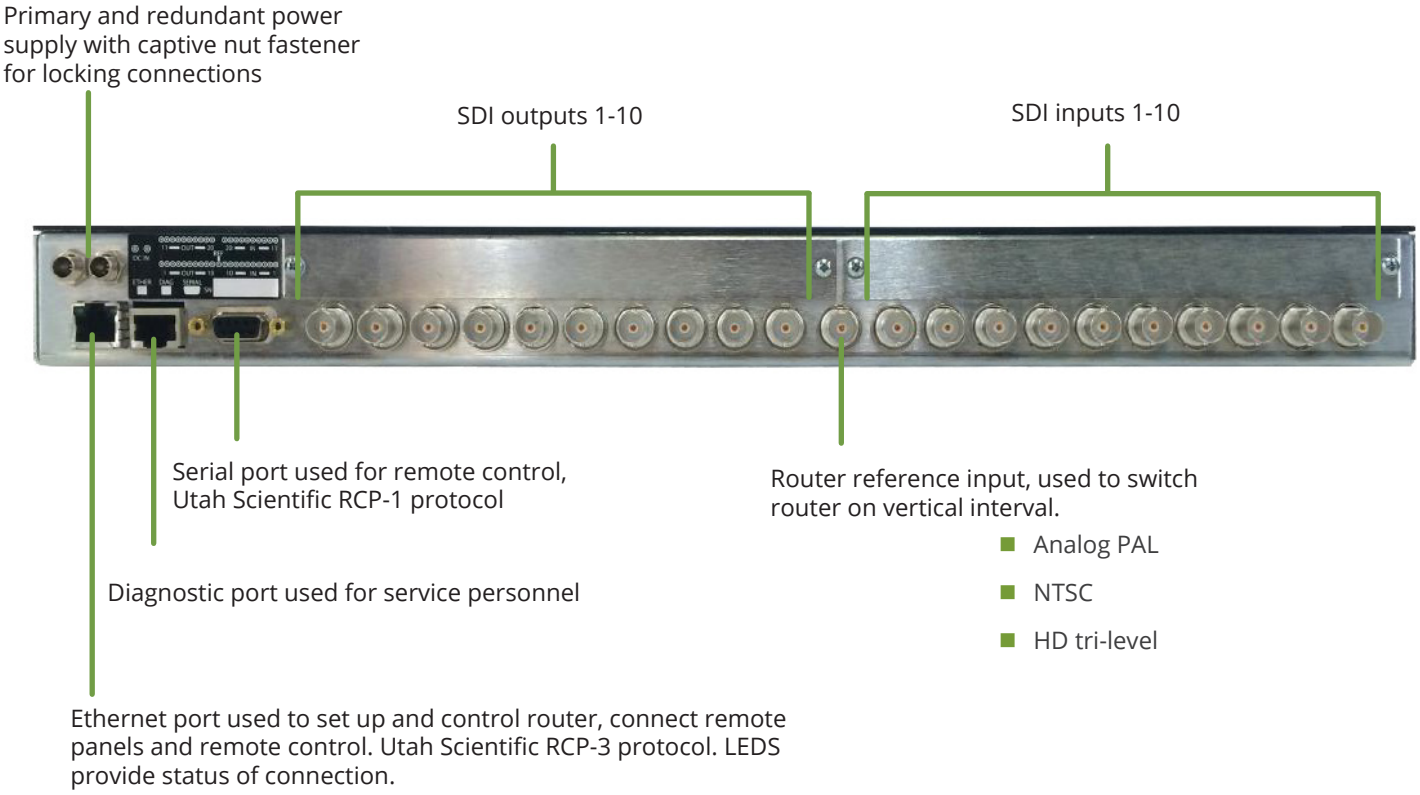
Optional 16 GPI and 16 GPO unit

# Compact Series

## UDS 10
## SDI 10x10 Router

At only 1RU in size the UDS 10 is the ideal product for small applications requiring 10 or less inputs and outputs of SDI routing. The UDS 10 also includes a native web server, local control panel with easy-label buttons and a DA 'output' block feature. Optional remote hardware panels and downloadable control software are also available.

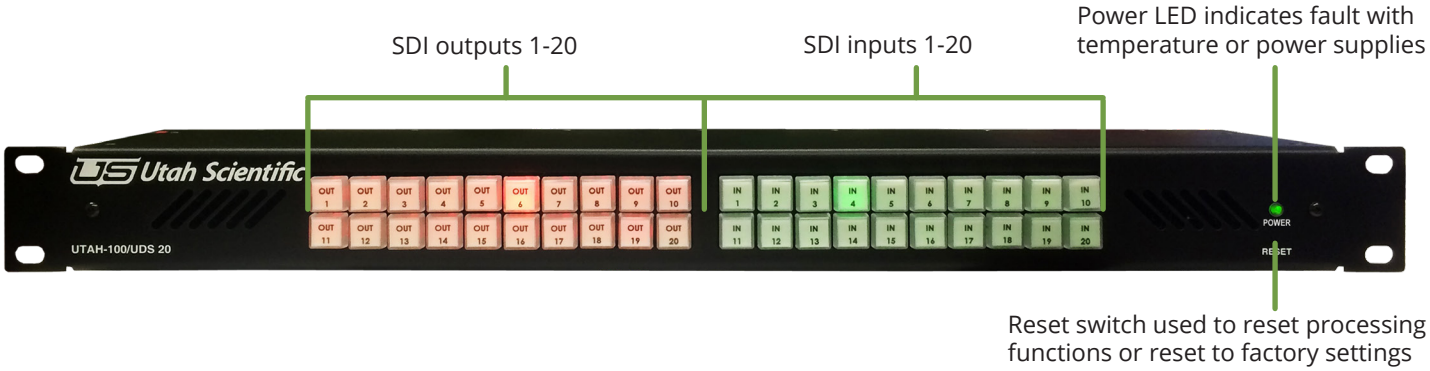


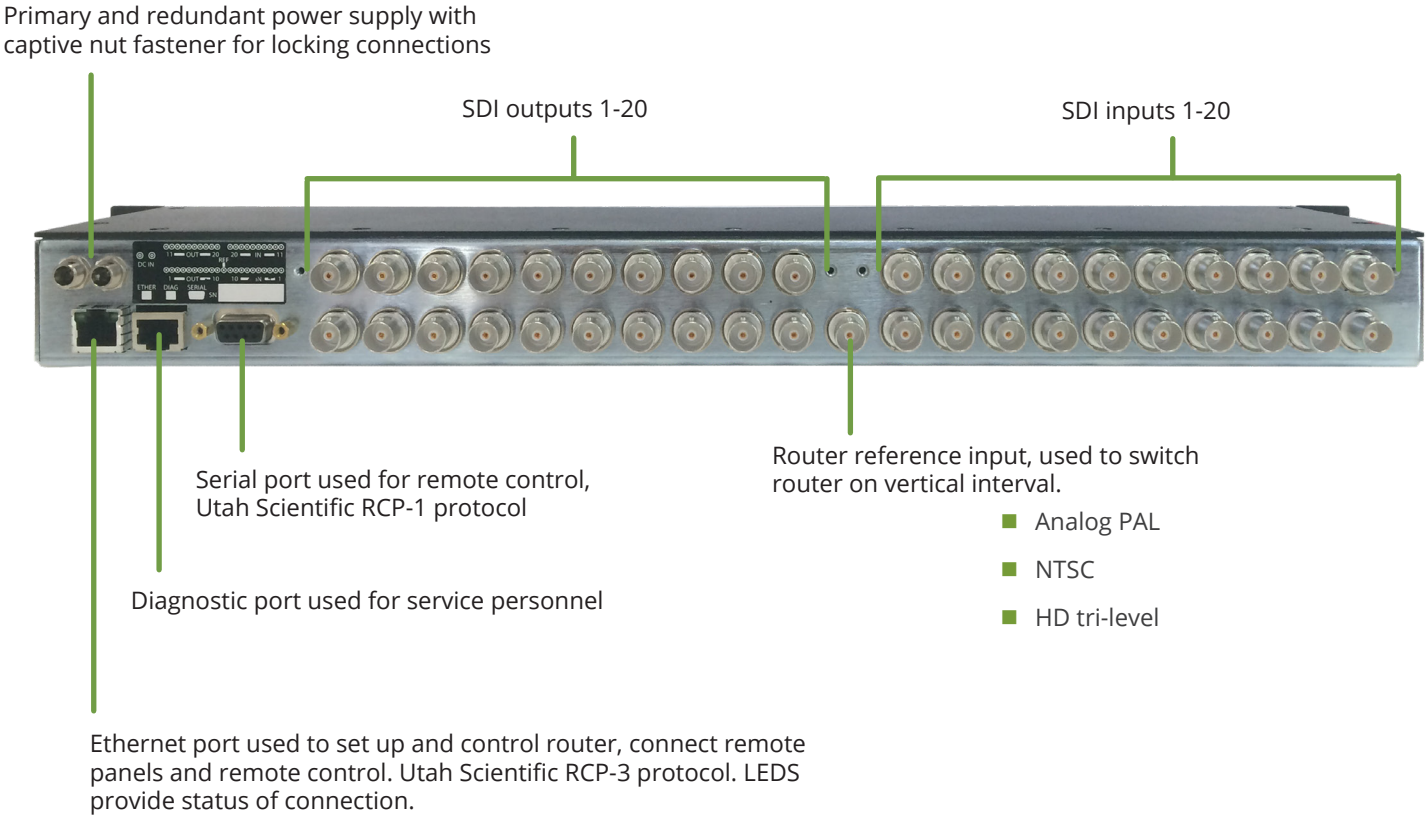



# Compact Series

## UDS 20
## SDI 20x20

Still contained in only 1RU, the UDS 20 is designed for applications with space limitations that require up to 20 inputs and outputs. The UDS 20 includes a native web server, local control panel as well as easy-label buttons and our DA 'output block' feature. Optional remote hardware panels and downloadable control software are also available.



## Compact Series

### UDS DA
### SDI 8x32 configurable Distribution Amplifier

The UDS DA offers a flexible, cost-effective distribution package contained in 1RU. Each DA provides 8 input and 32 assignable output ports. The UDS DA also comes equipped with native web server configuration so that each output port can be assigned to any input port allowing for total operational flexibility.

Power LED indicates fault with temperature or power supplies

Reset switch used to reset processing functions or reset to factory settings

Primary and redundant power supply with captive nut fastener for locking connections

SDI outputs 11-20

SDI inputs 30-21

SDI inputs 1-10

SDI outputs 32,31

Serial port used for remote control, Utah Scientific RCP-1 protocol

SDI inputs 8-1

Diagnostic port used for service personnel

Router reference input, not used for DA

Ethernet port used to set up and control router, connect remote panels and remote control. Utah Scientific RCP-3 protocol. LEDS provide status of connection.

# Compact Series

## UDS CP2
## Button Control Panel (Optional)

The UDS CP2 button control panel includes 36 programmable buttons that can be assigned to sources, destinations, salvos, and button functions. Page Up and Page Down buttons increase the panel capabilities by 2 pages for a total of 3 pages allowing for 32 additional functions per page. The native web server operates with standard web browsers for simple set up. A GUI replica of the hardware panel is included.

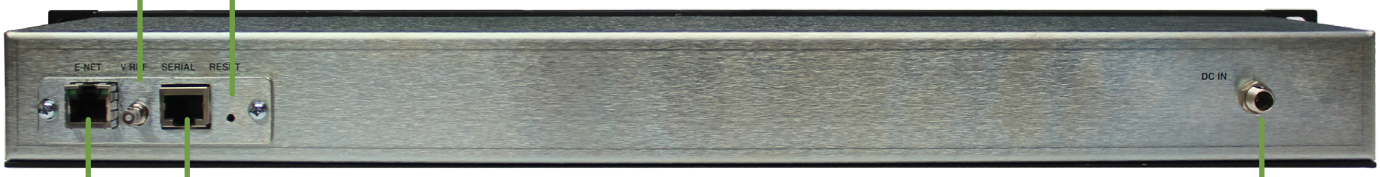
Destination buttons illuminate orange
assign destinations to any button on the panel

Function buttons illuminate red

Source buttons illuminate green
assign sources to any button the panel

Router reference input-Not used

Reset switch used to reset processing
functions or restore factory default settings




Power Supply with captive nut
fastener for locking connection

Serial Port Not Used

Ethernet port used to set up panel and connect to router.
LED's provide status of connection

## Compact Series

### UDS XY
### XY control panel (Optional)

The UDS XY control panel is designed to provide full-matrix control with limited labeling. It includes a high resolution display with scroll knob for quick selection of sources and destinations. Source and destination categories can be set up for device listings for even more flexibility. The native web server operates with standard web browsers for simples set up.

Scroll knob for quick selection

Power LED indicates fault with temperature or power supplies

Destination buttons illuminate yellow, source buttons illuminate green. Source, Destinations, salvos or functions can be assigned to any button

High resolution display for source and destination status

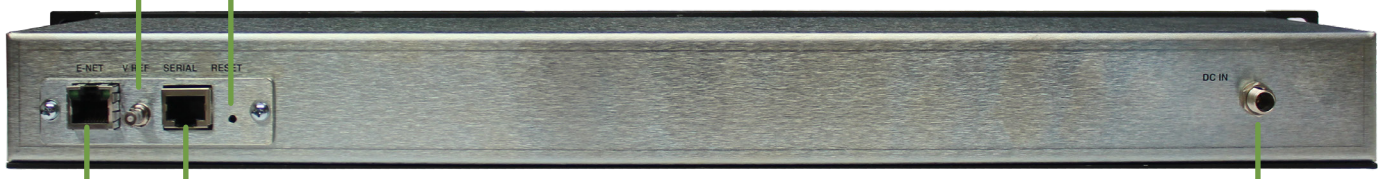
Illuminating function buttons

preset source active category selection button

Source Track button (if enabled)

Router reference input-Not used

Reset switch used to reset processing functions or restore factory default settings




Power Supply with captive nut fastener for locking connection

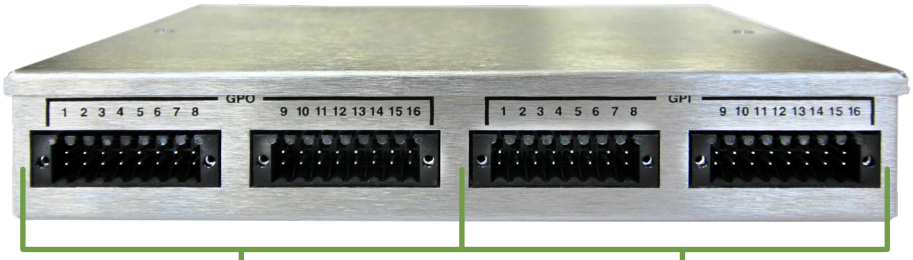
Serial Port Not Used

Ethernet port used to set up panel and connect to router. LED's provide status of connection

## Compact Series

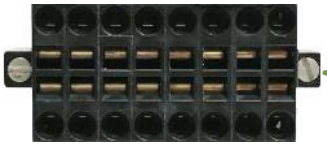
### UDS-GPIO (Optional)

The UDS-GPIO control unit is designed to extend the operation of the router controller to external devices by means of contact closures. The unit provides 16 in-bound contact closures, GPI's and 16 outbound with each assigned to a source. The GPI's can be configured for latching or revert operation. In revert (Joystick Over-ride) operation, the crosspoint associated with that contact is activated as long as the closure is active. When released the router is switched back to the previous source.




1-16 GPO's that are assignable to any source-destination combination

1-16 GPI's that are assignable to any source-destination combination

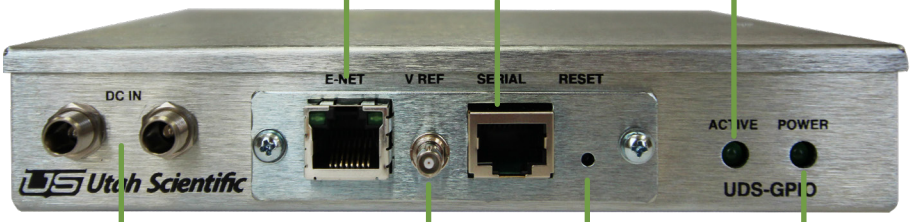


Detachable terminal blocks included

Ethernet port used to set up panel and connect router. LED's indicate connection status.

Active LED indicates Router Connection status.

Serial port- Not used



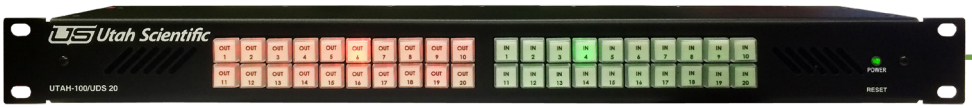

Router reference input- not used

Power LED indicates power supply status

Primary and redundant power supply with captive nut fastener for locking connections

Reset switch used to reset processing functions or restore factory default settings

## Compact Series




Each Device has a unique IP adress that is user selectable. You can Control up to 10 remote connections per router. This includes automation systems, hardware control panels and software control panels.

Set up modes

- Stand alone network
- House network

Web Server for configuration and control can be operated using a wireless network.

## Compact Series- Specifications

**Video Standards:**

- SMPTE 259M-c
- SMPTE 292M
- SMPTE 425M-A
- SMPTE 425-B
- SMPTE 310M
- DVB-ASI compliant

**Embedded Audio:** 20- bit synchronous 48 khz to SMPTE 272M-C
24-bit synchronous 48 khz to SMPTE 299M

**Video Inputs & Outputs**

**Formats:** Auto select for simultaneous operations of SD, HD,3G SDI, 2k & DVB-ASI
**Connector:** BNC, 1 per input and output
**Reclocking:** Automatic for all standard signal rates 270Mbps, 1.485Gbps, 2.970Gbps, DVB-ASI
Automatic bypass for non-standard signal rates 18 mbps-2.970Gbps
**Equalization:** Automatic 400, at 270Mbps,220m at 1.485Gbps,200m at 2.970Gbps with Belden 1694A or quivalent cable.

**Reference Input:** (1) BNC: Analog PAL, NTSC, or HD tri-level

**Control**

**(1) Rj-45:** 10/100 Ethernet- embedded web server- Utah Scientific RCP-3 Ethernet Protocol
**(1) Rj-45:** Diagnostic port
**(1) 422/232:** DB-9f Subminiature - Utah Scientific RCP-1 serial protocol

**Power** 90-240VAC 50/60Hz external +12V DC- (2) Captive nut fastener
Power consumption 30watts max

**Physical**

**Width:** 19" (48.26cm)
**Depth:** DA & Routers 4.25" (10.80cm)- Panels 3.75" (9.53cm)
**Height:** 1RU, 1.75" (4.45cm)
**Weight:** DA & Routers 4.8lb (2.1kg)- CP 3.8lb (1.7kg)- XY4lb (1.8kg)

**Environmental:** Operating temperature 32-104 °F (0-40 °C)
Relative humidity range: 0-90% non-condensing

10 Year Warranty