10-Port Ethernet Switch

The PRG 10-Port Ethernet Switch provides a powerful and convenient interface between Virtuoso® or DMX512 control consoles, and their associated control equipment using 10Base-T, 100 Base-TX copper, or 100Base-FX fiber optic media.

MAKING THE SWITCH

While a basic Ethernet hub is limited to broadcasting information one direction to all devices at once - making it susceptible to "collisions" - an Ethernet switch divides the network into multiple segments, acts as a high-speed selective bridge between the segments, and supports multiple connections with transmission and reception occurring simultaneously. The PRG Ethernet Switch not only exceeds the limitations of traditional Ethernet hubs, it also offers superior switch technology by virtue of its simple, easy-to-use operation. Unlike most commercial Ethernet switches, the PRG Ethernet Switch does not use complex configuration software, which can often misinterpret data signals as 'network attacks,' therefore shutting down your system at a critical instance.

FIBER OPTIC LIGHTS THE WAY

As the premier choice for data distribution, fiber optic provides the ability to transmit more information, more quickly, over longer distances with its high bandwidth, light-weight cabling. This means you can reliably send data up 2 kilometers away without the need for repeaters! In addition, the dielectric nature of optical fiber eliminates concern for proximity to Electromagnetic and Radio Frequency Interference. To further ensure data integrity in demanding lighting design environments, the PRG 10-Port Ethernet Switch's fiber optic connections are specifically designed for touring and stage applications with ruggedized LEMO® connectors, compatible with both the input and output connectors of Virtuoso® Fiber Optic Cables.

ONE FOR ALL

In addition to three fiber optic Ethernet ports, the PRG 10-Port Ethernet Switch provides seven copper Ethernet ports, which offer a continuing technology bridge as the lighting industry shifts from an established copper-based infrastructure toward fiber optics. With this flexibility, the PRG 10-Port Ethernet Switch is not only a perfect compliment to the Virtuoso® family of consoles, but a major benefactor to other DMX512 consoles and a wide variety of system devices.

Features

- **(7) ISOLATED COPPER ETHERNET PORTS FOR INPUT OF 10BASE-T OR 100BASE-TX STANDARD SIGNALS**

- **(3) FIBER OPTIC ETHERNET PORTS FOR TRANSMISSION OF 100BASE-FX STANDARD SIGNAL.**

  (2 PORTS WHICH ACCEPT A VIRTUOSO® FIBER OPTIC CABLE INPUT CONNECTOR AND 1 PORT WHICH ACCEPTS A VIRTUOSO® FIBER OPTIC CABLE OUTPUT CONNECTOR.)

- **AUTOMATIC DETECTION AND CONFIGURATION OF INPUT SIGNAL SPEED**

- **IMPERCEPTIBLE OPERATION WITHIN THE CONTROL SYSTEM**

- **LINK, TX DATA, AND RX DATA STATUS LEDS FOR ALL PORTS**

- **RUGGEDIZED LEMO® FIBER OPTIC CONNECTORS**

- **RUGGEDIZED, LATCHED NEUTRIK® ETHERCON® CONNECTORS FOR SUPERIOR DURABILITY AND RELIABILITY OVER TRADITIONAL PLASTIC RJ-45 CONNECTORS**

- **NEUTRIK® POWERCON® CONNECTOR FOR AC INPUT**

- **FRONT PANEL DC POWER STATUS LED**

- **STANDARD 1U 19" RACK MOUNT CHASSIS**

- **90 TO 264 VAC, 47 TO 63 HZ OPERATION**

10-Port Ethernet Switch Specifications

The unit shall be a PRG 10-Port Ethernet Switch designed to provide interface between a Virtuoso® console, or other model lighting console, and subsequent lighting control equipment. It shall operate automatically and invisibly within the control system.

The unit shall operate on 90 to 264 VAC, 47 to 63 Hz, and draw less than 60 watts continuously. There shall be one power input connector for inputting AC power to the unit. The unit shall have one green LED power indicator to show that DC power has been applied. There shall be no power switch, circuit breaker, or fuse accessible outside the unit. The unit shall accept network connections to its ports and route messages
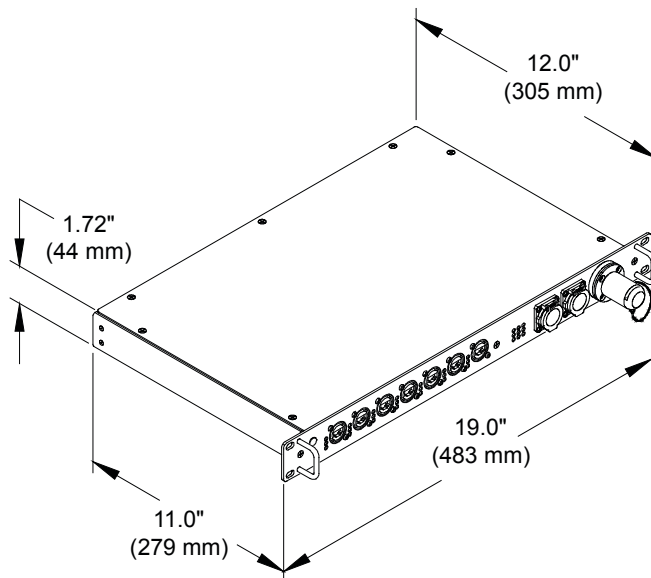
between ports in an efficient manner. The unit shall connect ports of different speeds and media types and shall also extend the network beyond the limits of a single collision domain. Each port on the unit shall have status LEDs indicating Link, TX Data, and RX Data.

The unit shall include seven isolated copper ports that can accept Ethernet signals using either 10Base-T or 100Base-TX standards. The unit shall automatically detect and set the speed of each port and shall crossover pairs and change the polarity of ports as necessary. The unit shall also include three fiber optic ports for transmission of 100Base-FX Ethernet signal. The speed and direction of these ports are fixed. The ports
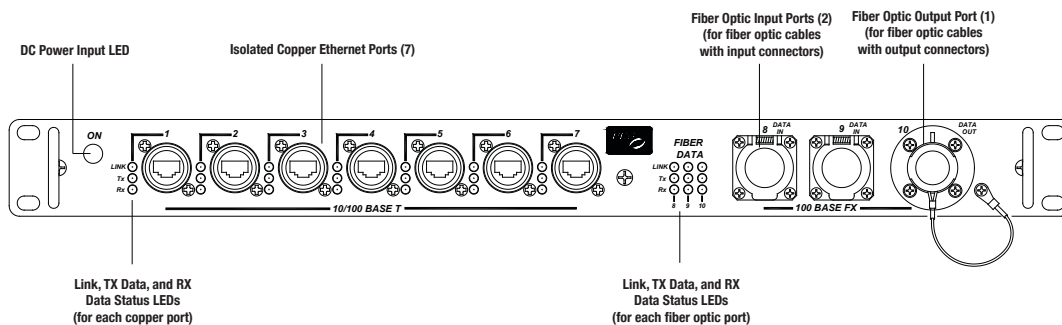
shall use 62.5/125um multi-mode fiber media at 1300nm wavelength and operate up to a 2KM distance.

The unit shall be housed in a standard 1U 19" rack mount chassis with an approximate depth of 11" behind the panel. The unit shall sealed and convection cooled with an operating temperature of –20°C to 50°C (-4°F to 122°F). The unit shall weigh 4.5 lbs (2.04 kg). The unit shall be certified to ANSI/UL 60950-1-UL Standard for Safety for Information Technology Equipment Safety (U.S.), CAN/CSA C22.2 No. 60950-1 Information Technology Equipment Safety (Canada), and carry the CE Mark (Europe).

Dimensions

12.0"
(305 mm)

1.72"
(44 mm)

19.0"
(483 mm)

11.0"
(279 mm)

Side View

DC Power Input LED

Isolated Copper Ethernet Ports (7)

Fiber Optic Input Ports (2)
(for fiber optic cables
with input connectors)

Fiber Optic Output Port (1)
(for fiber optic cables
with output connectors)

ON

FIBER DATA

10/100 BASE T

100 BASE FX

Link, TX Data, and RX
Data Status LEDs
(for each copper port)

Link, TX Data, and RX
Data Status LEDs
(for each fiber optic port)

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Ordering Information

20.9801.0201   10-Port Ethernet Switch