



Optical FireWire Repeater M4-200 (S800)

Stretch your Firewire Experience beyond copper



Description

The S800 Optical FireWire Repeater (M4-200) in use of a pair of two, each at both ends interfaces over fiber-optic cables provides a long distance IEEE 1394 interconnection, 500m (1640feet) over the limits of copper wire extension, 4.5m (15feet) without any distribution amplifiers or repeaters.

Any IEEE1394 device or controller at each end in general interfaces to each M4-200 repeater through each 4.5m copper cable and between two M4-200 repeaters remotely located over duplex multi-mode glass of fiber (MM GOF) cables. For ease of use and security of connection, duplex LC connector is adopted. Two electrical bilingual ports of 1394b-2002 standard are installed to enable to support S800 (800Mbps) data rate, fully complied with IEEE1394b-2002, but also backwardly S400, S200, and S100 by using DS (9 pin or 4 pin)-to- bilingual cables.

When applying to IEEE1394 devices or controllers having powers themselves, the M4-200 repeater requires plugging the external DC power adapter, delivered together with products in shipping package, only when the power indicating LED is off.

Features and Specifications

- ◆ Extends IEEE1394b protocol signals up to 500m (1640feet) over MM GOF.
- ◆ Fully complies not only with 1394b-2002 but also backwardly 1394a-2000 & 1995.
- ◆ Offers 800 (S800), 400 (S400), 200 (S200) and 100 (S100) Mbps in full duplex data rate.
- ◆ Offers two electrical bilingual ports and an optical duplex LC receptacle, most popular standard connector in fiber-optic industry.
- ◆ Dimension (W/H/D): 101/24/91 in mm
- ◆ Weight: 190g each
- ◆ Low power consumption: less 6W
- ◆ Free RF noises and EMI from fiber
- ◆ No software to install: Easy to use; plug and play.

Extend your Digital Connection!

Optical FireWire Repeater M4-200

Drawing Dimension [mm]



Product Certification

EMI and Immunity

The Opticis M4-200 repeater has been tested and found to comply with the limits for class A device, pursuant to Part 15 of FCC-rules and EN 55022/55024/61000-3 for CE certification. These limits are designed to provide reasonable protection due normal use with other home network appliance.

Eye Safety

The Opticis M4-200 repeater has been designed to meet Class 1 eye safety by adapting Opticis 850nm VCSEL transmitter, certified by FDA/CDRH and IEC 60825-1.

Shipping Options

- ◆ Two (2) Bilingual-to-Bilingual cables: S800
- ◆ Two (2) Bilingual-to-DS (6pins) cables: S400

Recommended Operating Conditions

Parameter	Symbol	Min	Typ	Max	Units
Ambient Operating Temperature	T_A	0	25	+ 50	°C
Storage Temperature	T_s	-30		+ 70	°C
Storage Humidity	H_s	10		85	RH%

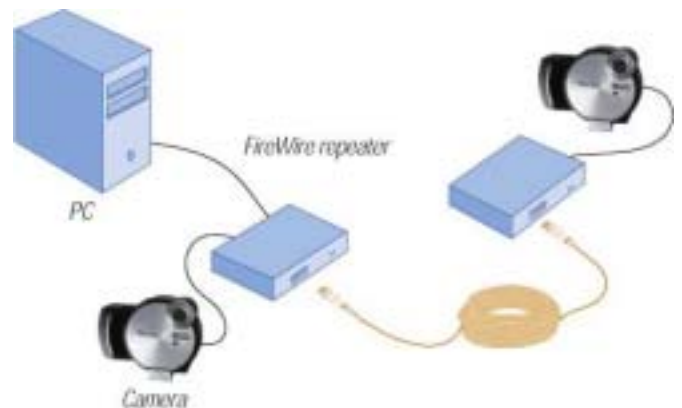
Electrical Power Supply Characteristics

($T_A = 0\text{ }^{\circ}\text{C}$ to $+50\text{ }^{\circ}\text{C}$, unless otherwise noted)

Parameter	Symbol	Min	Typ	Max	Units	
Supply Voltage	V_{CC}	4.5	5	5.5	V	
Supply Current	TX	I_{RCC}	-	170	200	mA
	RX	I_{RCC}	-	130	150	mA
Power Dissipation	TX	P_{TX}		0.85	1.1	W
	RX	P_{RX}	-	0.75	0.825	W

Applications

- ◆ PC link of peripherals in factory & office.
- ◆ Storage Area Networks and File server systems in SME.
- ◆ IEEE1394 camera interfaces for surveillance system and machinery vision.



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