

IEEE 1394 SFP

Small Form-Factor Pluggable Transceiver

Overview

The first IEEE 1394b standard compliant SFP devices is introduced in the industry. The SFP-1394 (FireWire/i.Link) transceivers work at the physical network layer. Using bit-for-bit operations, they are transparent to other network devices. They support range extension, topology changes, fiber-to-copper media conversion, and a full range of data rates from 100 Mbps to 1600 Mbps.

FireWire is a "protocol of choice" for the aerospace and aviation industries, and it is widely used in aircraft subsystem intercommunication.

The SFP-1394 models provide three connector options: 6-pin, 4-pin, and LC optical. The optical model transmits up to 150 meters at a wavelength of 850 nanometers over 62.5-micron multi-mode optical fiber. The copper media is limited to the IEEE 1394 standard specifications.

Features

- Data rate support:
 - Fiber - 100, 200, 400, 800, and 1600 Mbps
 - Copper - 100, 200, 400, and 800 Mbps
- Full transparency to other network nodes
- Three media connection models:
 - 6-pin (SFP-1394A)
 - 4-pin (SFP-1394B)
 - LC optical (SFP-FO-1394B)
- IEEE 1394b standard compliance
- MRV Media Cross Connect and Fiber Driver compatibility
- RoHS Directive: RoHS-5 compliant

Advantages

- Doubles the physical reach of FireWire and i.Link networks when used in a repeater configuration.
- Works with the MRV's MCC (Media Cross Connect) to simplify remote network topology changes for test automation.
- Allows the use of mixed fiber optic and copper infrastructures when used as a fiber-to-copper media converter.

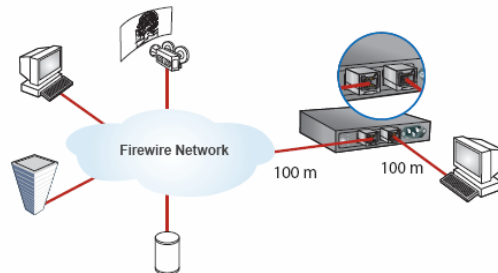
Product Overview



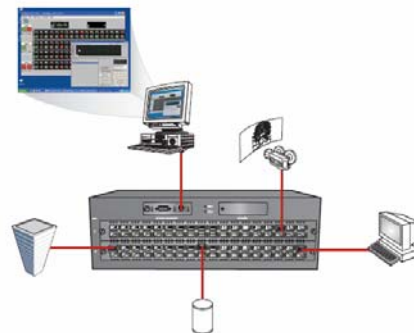
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Applications

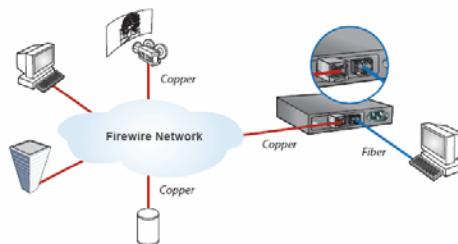
Application A: Double the Network Reach



Application B: Remote Topology Changes for Better Automation



Application C: Mixed Copper/Fiber Infrastructures



Ordering Information

Model	Description	Data Rate (Mbps)	Connector	Wavelength	Output Power (dBm)	Min Rec Sensitivity (dBm)	Saturation (dBm)	Min Link Budget (dB)	Output (V)	Temp (C)	Min Range (m)
SFP-1394A	Firewire Copper SFP	100-800	Firewire type A (6-pin)	-	-	-	-	-	3.3	-5 to 70	-
SFP-1394B	Firewire Copper SFP	100-800	Firewire type B (4-pin)	-	-	-	-	-	3.3	-5 to 70	-
SFP-FO-1394B	Firewire Fiber SFP	100-1600	LC	TX: 850nm RX: 850nm	Min: -10 Max: -5	-18	0	9	3.3	-5 to 70	100
SFP-FO5-1394B	Firewire Fiber SFP	100-1600	LC	TX: 850nm RX: 850nm	Min: -10 Max: -5	-18	0	9	3.3	-5 to 70	500

Source: Product Datasheet from MRV Manufacturer

About Cell Technology

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