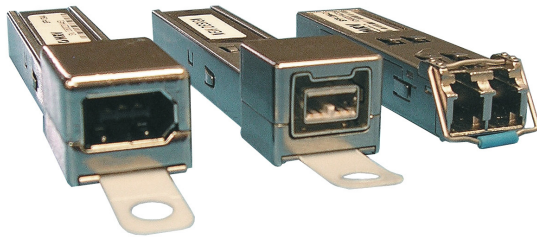


Datasheet

IEEE 1394 SFP (FireWire / i.Link)



Overview

MRV's 1394B transceivers are the first SFP devices in the industry to comply with the IEEE 1394b standard.

The SFP-1394 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 inter-communication.

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.

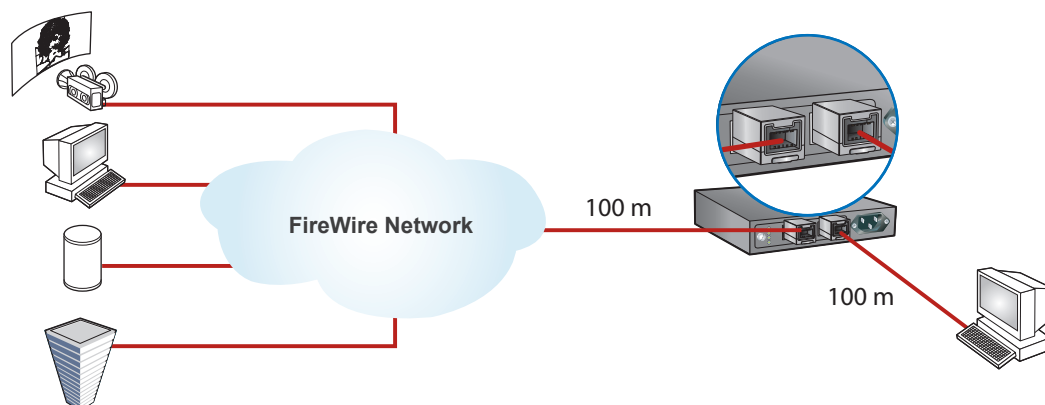
Highlights

- 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 compatibility

Benefits

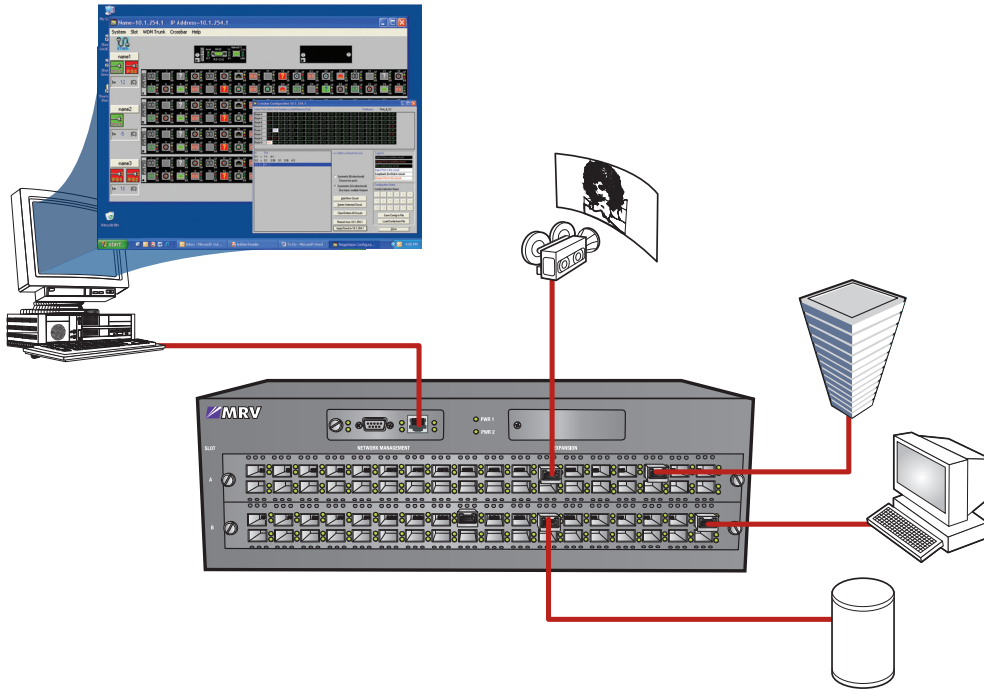
- Doubles the physical reach of FireWire and i.Link networks when used in a repeater configuration
- Works with the MCC (Media Cross Connect) to simplify remote network topology changes for test automation
- Allows the use of mixed fiber optic and copper infrastructures when used as a fiber-to-copper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

Application A: Double the Network Reach

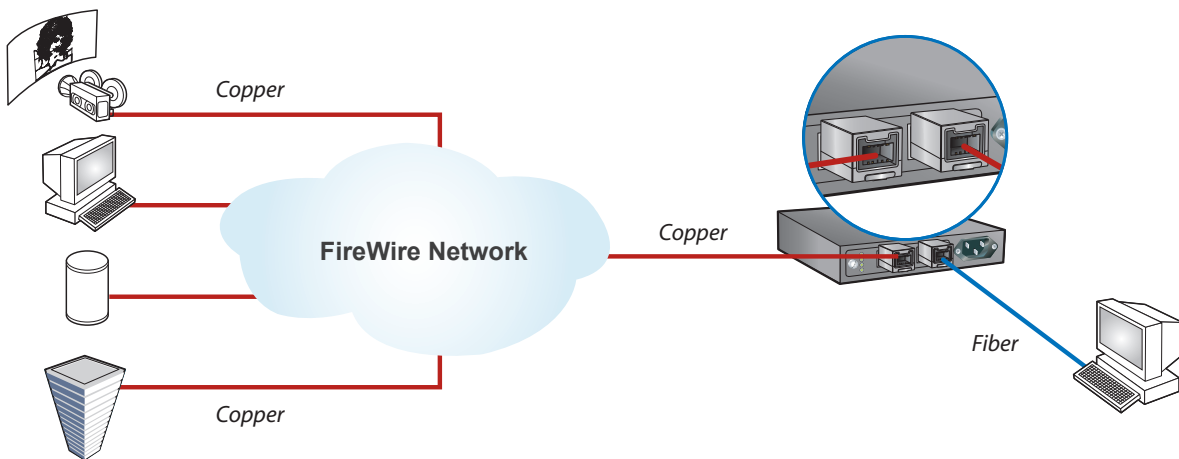


Datasheet

Application B: Remote Topology Changes for Better Automation



Application C: Mixed Copper/Fiber Infrastructures



**Datasheet****Ordering Information: Copper**

| Model | Description | Data Rate (Mbps) | Connectors | Supply Voltage (V) | Temperature Range (°C) |
|-----------|---------------------|------------------|-------------------------|--------------------|------------------------|
| 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 A (4-pin) | 3.3 | -5 to 70 |

Ordering Information: Fiber-Optics

| Model | Description | Data Rate (Mbps) | Connectors | Wavelength | | Output Power (dBm) | | Min. Receiver Sensitivity (dBm) | Saturation (dBm) | Min. Link Budget (dB) | Supply Voltage (V) | Temperature Range (°C) | Maximum Distance (m) |
|---------------|--------------------|------------------|------------|------------|-----|--------------------|-----|---------------------------------|------------------|-----------------------|--------------------|------------------------|----------------------|
| | | | | Tx | Rx | Min | Max | | | | | | |
| SFP-FO-1394B | FireWire Fiber SFP | 100 - 1600 | LC | 850 | 850 | -10 | -5 | -18 | 0 | 9 | 3.3 | -5 to 70 | 100 |
| SFP-FO5-1394B | FireWire Fiber SFP | 100 - 1600 | LC | 850 | 850 | -10 | -5 | -18 | 0 | 9 | 3.3 | -5 to 70 | 500 |

Regulatory and Industry Compliances

Class 1 Laser optical SFPs comply with EN 60825-1: 2007 and 21 CFR 1040.10 except for deviations pursuant to Laser Notice No. 50 dated June 24, 2007
 Certified by one or more of the following agencies: TÜV, UL, CSA
 RoHS Directive; China RoHS; California RoHS Law, REACH Directive SVHC; WEEE Directive
 The Quality Management System is certified to ISO 9001 by QMI-SAI Global
 The Environmental Management System is in compliance with ISO 14001

Warnings

Handling Precautions: This device is susceptible to damage as a result of electrostatic discharge (ESD). A static free environment is highly recommended. Follow guidelines according to proper ESD procedures.
Laser Safety: Radiation emitted by laser devices can be dangerous to human eyes. Avoid eye exposure to direct or indirect radiation.

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