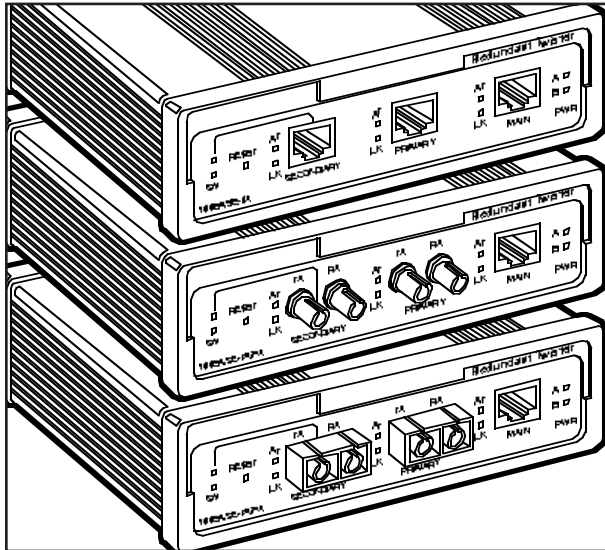


BLACK BOX[®]

NETWORK SERVICES

REDUNDANT TWISTER MEDIA CONVERTERS



Stop worrying about network reliability! Now you can concentrate on your business.

Key Features

- ▶ **Power/data back-up saves important work in critical applications.**
- ▶ **Can return instantly to primary power after failure.**
- ▶ **No interruption during primary/secondary power changeover.**
- ▶ **Reliable replacement for spanning trees and redundant NICs.**
- ▶ **Signal retiming allows maximum cable runs.**
- ▶ **Easy DIP switches mean multiple options for configuration.**

The facts should disturb even the most weathered business veteran. If a medium-sized LAN goes down, the typical cost is £214 per minute. For a UNIX network, the cost can peak at £452 per minute. A retail business? £857 per minute. How about a brokerage firm? £77,142 per minute. That's £1285 a second. Those are the scary figures from Computer Reseller News.

The Redundant Twister media converters from Black Box can help your business go a long way toward preventing these severe, potentially catastrophic, losses in time and revenue.

These media converters feature both power and data redundancy. If the primary network link fails, the Redundant Twister instantaneously toggles to a back-up data path without a single interruption in the system. In the same way, the Redundant

Twister protects against sags, brownouts, failures, and spikes with a secondary power path.

These media converters are also better at preventing network failures than more typical solutions like duplicated network hardware and spanning trees.

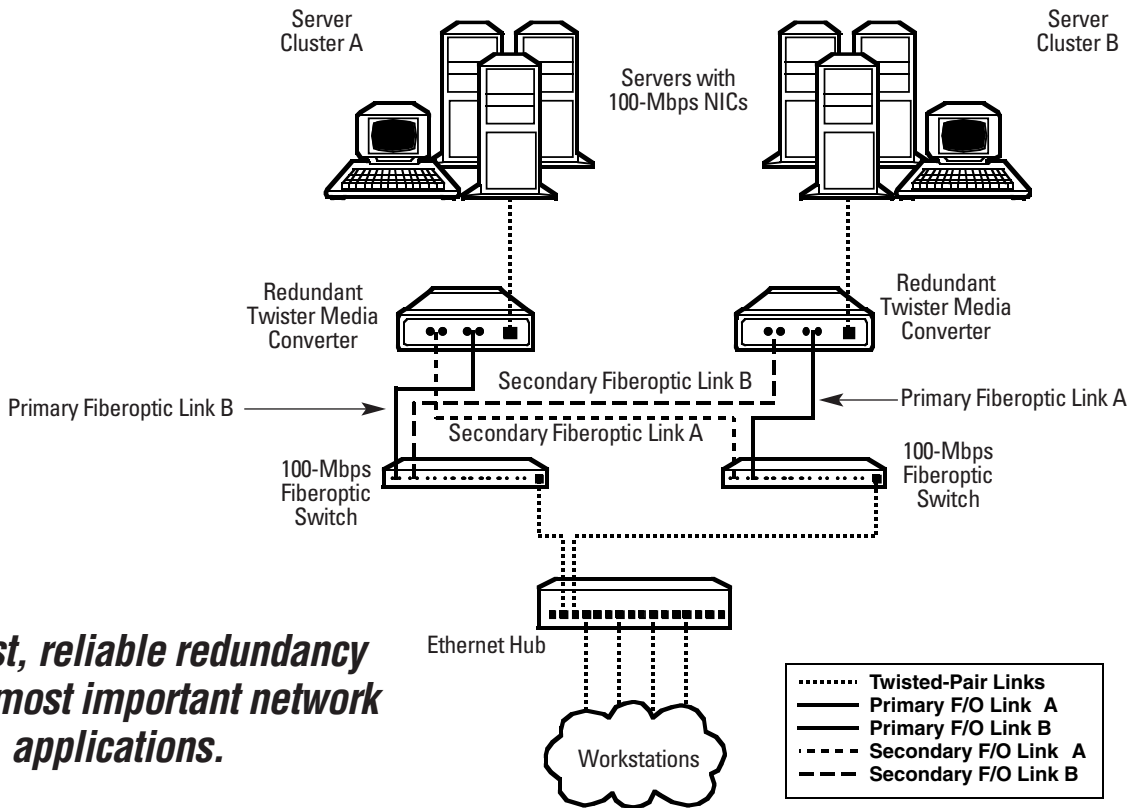
While those two methods allow redundant links and multiple connection points on the network, these measures are costly and do not work well for time-critical, high-bandwidth applications. Network sessions often "time out" during recovery periods, and recovery is significantly slow—at least 30 seconds and sometimes 1 minute. The additional network traffic load also compromises performance.

The Redundant Twister effectively eliminates these problems. It doesn't depend on specific software protocols; it's hardware dependent. Because

the Twister integrates into the network on the physical layer, using it doesn't require modification of MAC addresses and router tables. And switching to backup takes an imperceptible 20 μ s (1,500 bits of data lost.)

The Redundant Twister is flexible. It operates transparently when used with IEEE 802.3u-compliant switches, hubs, routers, and NICs. It can also be used with multiple switches and servers in larger network applications.

Manual switches allow multiple configurations, and you can use a variety of media types—Category 5 UTP, single-mode fiber, and multimode fiber. The Twister also supports 100- and 200-Mbps (half- and full-duplex) data rates.



**Low-cost, reliable redundancy
for your most important network
applications.**

Specifications

Data Rate — 200 Mbps full-duplex,
100 Mbps half-duplex

Bit Delay — < 40

Duplex Mode — Half/Full Auto

Multimode F/O Interface —

Connector: ST or SC;

RX Input Sensitivity:

-31 dBm minimum;

Output Power:

-14 dBm to -23.5 dBm

(50/125 μm);

-14 dBm to -20 dBm

(62.5/125 μm);

Link Length:

1.24 mi., full duplex;

Cable Type: 50/125, 62.5/125,

100/140 μm F/O

Twisted-Pair Interface —

Connector: Shielded RJ-45,

8-Pin Jack;

Impedance: 100 ohms nominal;

Signal Level Output:

0.95V - 1.05V (differential);

Signal Level Input:

350mV minimum;

Link Length: 328.1 ft.;

Cable: Category 5 UTP

Single-Mode F/O Interface —

Connector: SC;

RX Input Sensitivity:

-31 dBm minimum;

Output Power: -8 dBm to

-15 dBm (9/125 μm);

Link Length: 9.3 mi.,

full duplex;

Cable Type: 8.3/125, 8.7/125,

9/125, 10/025 μm F/O

Indicators —

(1) Power, (1) Link, (1) Activity,

(1) Switch to Secondary

Power —

Input: 90–250 VAC, 50/60 Hz,

external autosensing power

supply;

Output: +12 VDC @ 1 A

Operating Temperature —

32 to 122° F

Storage Temperature —

-86 to +158° F

Humidity —

5% to 95%, non-condensing

Size — 3.8 x 14.7 x 11.4 cm

Weight — 1.4 kg

Ordering Information

ITEM

CODE

Redundant Twister Media Converters

100BASE-TX to Dual FX

SC MultimodeLMC400A-MMSC

ST MultimodeLMC400A-MMST

Single-ModeLMC400A-SMSC

100BASE-TX to Dual TXLMC400A-TX

For these media converters, you may also need cables:

Category 5 Solid-Conductor Cable, 4-Pair, Straight-Pinned, PVC, 10-ft. (3.0-m).....EYN737MS-0010

Multimode Duplex Fibre Optic Cable, PVC, ST-ST, Custom LengthsEFN062-CC

Multimode Duplex Fibre Optic Cable, PVC, SC-SC Custom LengthsEFN4025

Single-Mode Duplex Fibre Optic Cable, SC-SC, Custom LengthsEFN5010