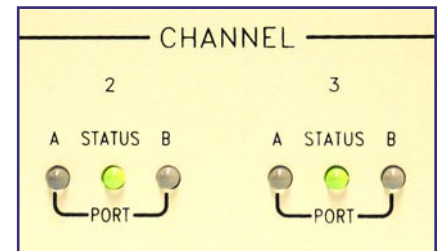


The FX-4S Fiber Optic Extender provides a simple means to interconnect up to four Naval Tactical Data System (NTDS) Type E Serial devices with other devices located up to 14 km apart. It provides seamless connectivity and a transparent interconnection between devices. By regenerating 100% of the incoming signal, the FX-4S ensures maximum data integrity.

As part of X-COM's line of Commercial-Off-The-Shelf (COTS) NTDS solutions, the rack-mountable FX-4S provides system managers with unprecedented design flexibility to interconnect remote equipment as if it were located in the same laboratory. The FX-4S is designed to cost-effectively meet the unique needs of today's NTDS development, evaluation, and training environments.



▲ LED displays on the front panel simplify the monitoring of link status

Features

Extended Range

NTDS devices, other FX-4S extenders, or XPS-32 switches up to 14 km away can communicate directly via fiber optic cables

Flexible Fiber-Link Options

Available in two configurations - a dedicated fiber pair per channel (four fiber pairs total) or with all four channels combined over a single fiber pair

Transparent

Provides transparent, long-range, low-latency, full 10 Mbps data rate simultaneous operation

Clear and Accurate

X-COM's Suresync™ oversampling provides unmatched sensitivity and noise immunity

Enables Remote Configurations

Equipment located in remote labs can be combined into new virtually co-located configurations

Low Maintenance

Modular design simplifies maintenance and increases reliability

Reliable

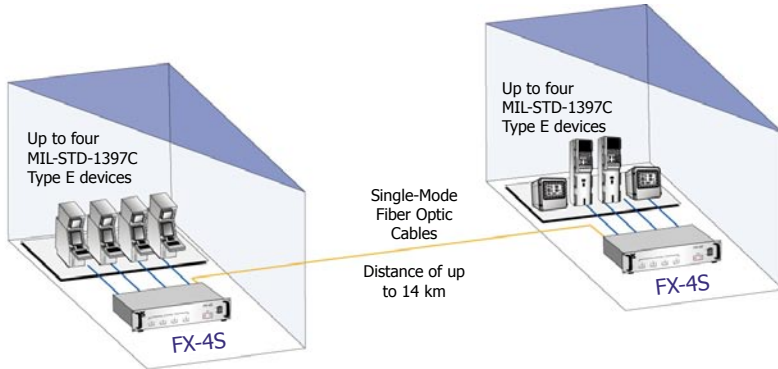
Patented signal processing algorithm and 100% signal regeneration ensures maximum data integrity in demanding environments

Low-Power Consumption

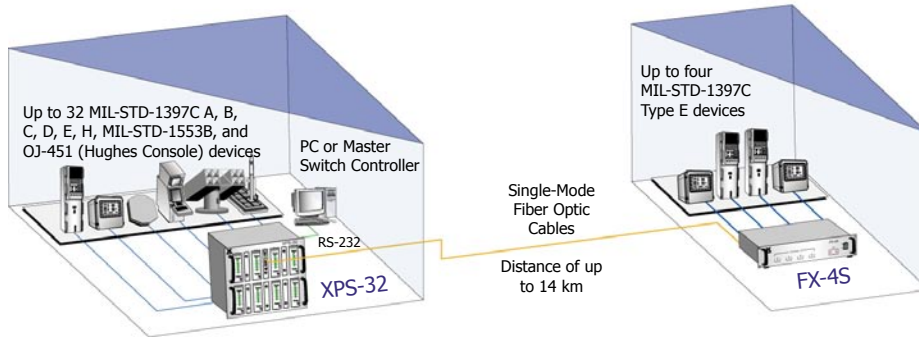
Reduces heat generation, provides longer life, and increases reliability

FX-4S Typical Applications

FX-4S to FX-4S Range Extension



FX-4S to Matrix Switch Range Extension



Specifications

Interface:
MIL-STD-1397C Type E

Size:
FX-4S Chassis:
3 1/2" (2U) H x 15" D x 19" W
(19" rack mount)

Weight:
Approximately 15 lbs.

Power:
Standard IEC 115 VAC

X-COM Systems, LLC
12345-B Sunrise Valley Drive
Reston, VA 20191
Phone: (703) 390-1087
Fax: (703) 390-1086
<http://www.SystemsX.com>

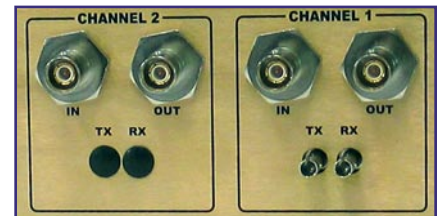
Typical Applications

The FX-4S is typically used at shore-based test, evaluation, and training commands to link remotely-located NTDS equipment, such as radar or sonar units, to a central switching center. The FX-4S provides the means for equipment located in remote labs on opposite sides of the campus to be used together in new configurations. Using remote equipment in local configurations provides increased flexibility and capability while eliminating the need for additional expensive equipment purchases.

To maximize flexibility, the FX-4S is available in two configurations. These devices can be connected with either a dedicated fiber pair per channel (four fiber pairs total) or all four channels can be combined over a single fiber pair.

System Design and Testing

The FX-4S delivers performance with reliability. It is modular, reliable, simple to repair, and requires no routine maintenance. Front-panel status indicators allow for easy monitoring of link status. It has been rigorously field-tested with demonstrated bit-error rates of less than 10^{-10} and latency less than 500 nanoseconds.



▲ Each FX-4S extends NTDS serial ranges to 14 km using a single fiber optic pair



◀ FX-4S Rear-Panel View