BLACK BOX®
NETWORK SERVICES

EXPRESS 8-PORT MUX

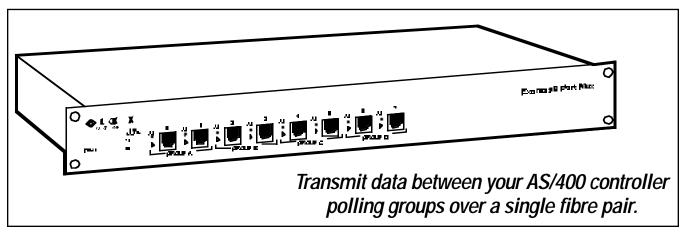*Transmit data between your AS/400 controller polling groups over a single fibre pair.*

Key Features

▶ *The only fibre optic mux that supports split-polling on enhanced AS/400 workstation controllers **without** requiring PTFs!*

▶ *Automatic detection of 1- or 2-Mbps (Express) data rates.*

▶ *Extends AS/400 ports up to 15,000 feet (4572 m) on multimode fibre optic cable.*

▶ *Up to 56 devices supported from two controllers on a single pair of fibre optic cable.*

▶ *Supports both point-to-point and multipoint applications.*

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Let Black Box give your IBM® System/3x or AS/400® network some "backbone." The Express 8-Port Mux can eliminate the expense and performance limitations of a remote controller and leased-lines in campus-area environments. Using a backbone wiring scheme consisting of fibre optic cabling, local workstation controller ports can be multiplexed and extended to remote user-areas as far as 15,000 feet (4572 m) away from the host.

The Express 8-Port Mux takes advantage of all the increased performance of the newest AS/400e Twinaxial Workstation Controllers. It allows up to two AS/400 controller polling groups to be transmitted over a single fibre optic pair. That means up to two AS/400e, AS/400, System/36 hosts, or 5494 Remote Control Units can simultaneously share a single set of fibre optic cabling. Controller redundancy and maximum fibre optic efficiency are obtained by multiplexing four

ports each from two separate controllers to connect up to a total device capacity of 56 remote 5250-type devices (such as 5250 Express Adapters or twinax displays). This feature also allows all new AS/400e controllers to provide their maximum throughput potential by transparently multiplexing the split-polling feature without requiring performance-robbing Programming Temporary Fixes (PTFs).

IBM has introduced a number of enhancements to the 5250 (twinaxial) protocol. The latest AS/400e models, with the new Enhanced Workstation Controller (WSC), now include support for the faster 5250 Express Data Stream and TCP/IP. The throughput performance gain is significant, rivaling that of a LAN-connected device, without the distance limitations and technical issues that arise during the implementation of a LAN. The new 5250 Express Data

Stream has two independent modes: Optimized mode and 2-Mbps mode. Each of these modes changes the physical communication characteristics from the host controller port to the desktop 5250 device. Optimized mode streamlines data transmissions to the desktop device by reducing the number of bits required to transmit the same amount of data, so that transmission occurs almost twice as fast as in normal data transfers. The 2-Mbps mode doubles overall line speed from 1 Mbps to 2 Mbps. When used together, throughput can be increased by up to four times.

In addition, a new method of terminal communication called split-polling is now standard on new AS/400e Enhanced WSCs. By changing the method of polling, the new IBM Enhanced WSCs that support the 5250 Enhanced Data Stream also allow devices to communicate

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with the host more frequently than standard controllers do. Using these controllers can improve the performance of legacy devices, even without the 5250 Express capability, by up to 200%. The Enhanced WSC provides a split-polling group so that communications between the host controller and various devices can occur simultaneously between two groups of four ports, rather than once across all eight ports of an IBM workstation controller card.

The combined performance gain when using the Express Data Stream and the split-polling feature on the Enhanced WSC is an 800% improvement over legacy devices using the older polling scheme.

The Express 8-Port Mux has eight shielded RJ-45 port connections and a DB25 direct-connection, eliminating the need for the twinaxial brick and associated twinaxial cabling. Link connectivity is via ST fibre optic multimode connection with the ability to operate in both point-to-point and multi-point ring topologies. This reduces hardware requirements by up to 50%.

Other features include advanced noise filtering, LED port diagnostics, configurable UTP pin assignments, and a field-replaceable wide-ranging power supply.

Why Buy From Black Box? Exceptional Value. Exceptional Tech Support.

Recognise any of these situations?

- You wait more than 30 minutes to get through to a vendor's tech support.
- The so-called "tech" can't help you or gives you the wrong answer.
- You don't have a purchase order number and the tech refuses to help you.

According to a survey by Data Communications magazine, 90% of network managers surveyed say that getting the technical support they need is extremely important when choosing a vendor. But even though network managers pay anywhere from 10 to 20% of their overall purchase price for a basic service and support contract, the technical support and service they receive falls far short of their expectations—and certainly isn't worth what they paid.

At Black Box, we guarantee the best value and the best support. You can even consult our Technical Support Experts before you buy if you need help selecting just the right component for your application.

Don't waste time and money—call Black Box today.

Specifications

Protocol — 5250

Data Rate — 1 and 2 Mbps

Ports — 8

Maximum Distance — High-speed DB25 cable: 9.1 m (30 ft.); Category 3 cable: Up to 609.6 m (2000 ft.); Category 5 cable: Up to 670.6 m (2200 ft.); Multimode fibre; Up to 2011.7 m (6600 ft.)

Fibre Optic Budget — 12 dB (typical)

Peak Power Wavelength — 820 nm

Indicators — (1) Power, (2) TX activity, (2) RX activity, (14) Express mode, (14) Data activity

Connectors — (8) Shielded RJ-45, (1) DB25, (2) ST

Temperature Tolerance — Operating: 0 to 40°C (32 to 104°F); Storage: 0 to 85°C (32 to 185°F)

Humidity Tolerance — 95% noncondensing

Power — 100–240 VAC to +5 VDC external power supply

Size — 4.4H x 48.3W x 22.2D cm (1.75"H (1U) x 19"W x 8.75"D)

Weight — 2.5 kg (5.6 lb.)

Ordering Information

ITEM	CODE
Express 8-Port Mux...IC219A	