



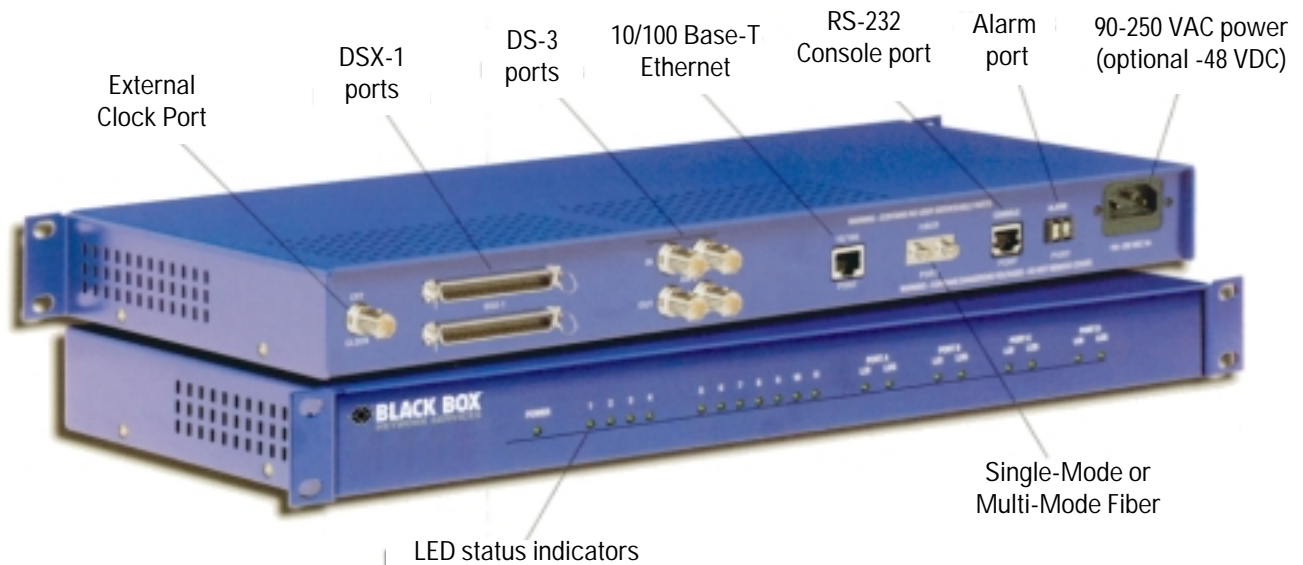
# BLACK BOX<sup>®</sup>

## NETWORK SERVICES

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Black Box Corporation.

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## FAST45 SERVICE DELIVERY UNIT



### Key Features

- ▶ **Bi-directional, full-duplex bandwidth at user-required speeds: 1.5/2.0, 45 and 100 Mbps**
- ▶ **Switched Ethernet port for secure VPNs (Intranet) and Internet traffic.**
- ▶ **An easy-to-use SNMP/HTTP network management system.**
- ▶ **1U high chassis requiring a minimal footprint in expensive collocation facilities.**

The market for dedicated T1/E1 circuits continues to grow unabated. Today's choices for delivering multiple T1 /E1 circuits to a remote site are not always the most cost-effective. The choices include a bundled loop using DSL technology on copper circuits and a fiber loop using SONET/SDH technology~ Now, there is an intermediate solution that combines the DSL bundling concept with fiber. Introducing the newest Black Box product, the Fast45 Service Delivery Unit.

The Fast45 SDU works with existing SONET/SDH multiplexers to deliver 28 T1 or 21 E1 circuits to a remote site using a single fiber circuit. The Fast45 also delivers one 100-Mbps Fast Ethernet port for high speed data transport.

The Fast45 is used by Local Exchange Carriers to connect remote users to PSTN/ISDN Voice, Intranet Access (VPN),

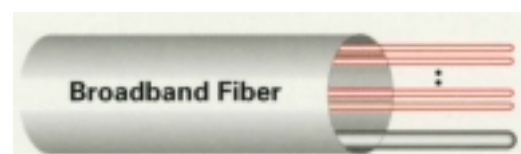
Frame Relay, ATM, Leased lines and Internet Access using a single platform.

The Fast45 simultaneously delivers a full bandwidth service to every port:

- ▶ One full-bandwidth 45-Mbps Channelized DS-3 port
- ▶ (Optionally) 28 T1(1.5 Mbps) or 21 E1 (2.0Mbps) full-bandwidth ports
- ▶ One full-bandwidth 100-Mbps Fast Ethernet

The Fast45 supports web-based provisioning, configuration, management, and monitoring, as well as SNMP. To turn-up a new T1 user, the carrier simply turns the DSX- 1 port ON, and connects the customer.

The Fast45 lowers the costs for deploying T1, E1, and 10/100 Mbps services.



28xT1 or  
21xE1 or  
1xDS-3  
100 Mbps  
Ethernet

Each Line represents a full-duplex channel

# Fast45 Applications

Black Box introduces a more practical way to get broadband services to the customer site: carrying the T1/E1 circuits over fiber with the Fast45 SDU. The Fast45 presents a Channelized DS-3 port at the carrier's point-of-presence to connect to the ADM. At the remote site, the Fast45 breaks the Channelized DS-3 into 28 DSi (or 21 E1) circuits that can connect to standard T1/E1 customer-supplied equipment.

The Fast45 solves three problems: it delivers multiple T1/E1 circuits, over long distances with minimal expense. It eliminates the costly approach of deploying an Add/Drop

Multiplexer at the customer premise, typical in a SONET/SDH metro network. The Fast45 also extends the distances of the T1/E1 circuits to 70km, more than 12 times the traditional 5km distance of copper-based xDSL technology. The Fast45 vastly improves upon the usual deployment scenarios for multiple T1/E1 circuits.

The Fast45 supports Internal, Network, and External clocking. The unit is also available with -48VDC or 90—250VAC power supplies. For medium density locations, cellular base stations, and office parks, the Fast45 delivers T1/E1 circuits cost-

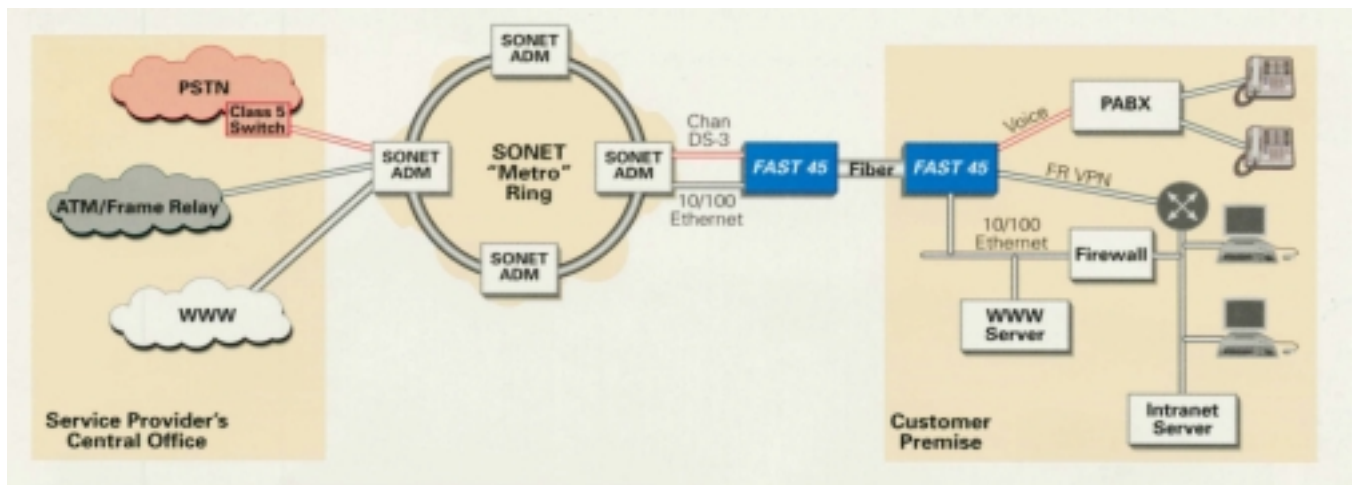
effectively. The unit is remotely or locally managed from the SNMP/HTTP web-based management system.

### Technical Specifications:

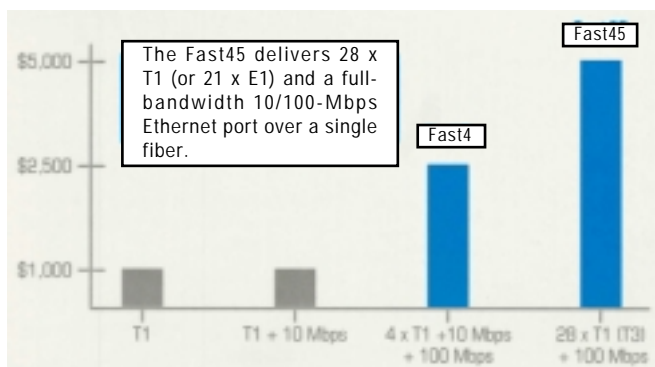
- ▶ Single or multi-mode fiber interface on an SC connector.
- ▶ Auto-sensing, full-duplex 10/100 Fast Ethernet port presented on an RJ45F
- ▶ Full-duplex 45-Mbps DS-3 port presented on dual -BNC
- ▶ 28 T1 or 21 E1 ports presented on two 64-pin CHAMP

connectors

- ▶ RS-232 Control Port presented on an RJ45 connector.
- ▶ IEC 320 connector supporting a 90—250 VAC power source (optional support for -34 to -72 VDC available to special order)
- ▶ Alarm port for external presentation of major/minor arms



# Service Positioning with the Fast45



## Ordering Information

ITEM	CODE
Fast45 Service Delivery Unit .....	MXUF045-SC-SM

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