

T1 Link Encryptor



Advanced Wide Area Network Encryption

- Secure T1 Voice Circuits
- Secure T1 Data Networks
- Secure T1 Video Codecs
- Protocol Transparent

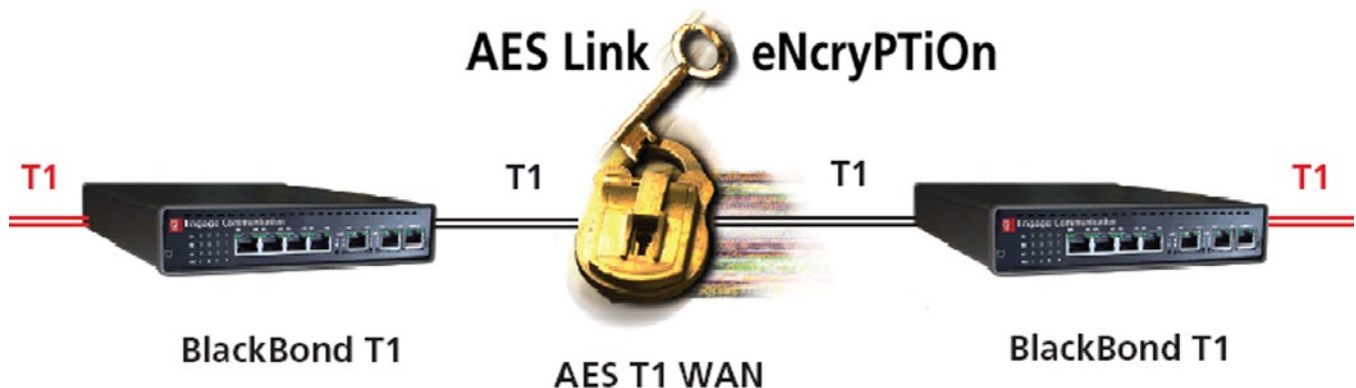
Secure Sensitive Voice, Video and Data Communications

The Engage **Black•Bond T1** Link Encryptor utilizes the **Advanced Encryption Standard** to secure sensitive information transmitted over point to point or dial-up T1 communication links for:

- *Department of Defense*
- *National, State and Local Governments*
- *Public Safety Networks*
- *Homeland Security*
- *Multi-Site Commercial Enterprises*

The **Black•Bond T1** interface has over a decade of proven interoperability with the full range of T1 communication equipment including:

- *Cellular Base Stations*
- *WAN Bridges and Routers*
- *PBX Trunks*
- *Video Codecs*
- *Voice and Data Multiplexers*



BlackBond Standard Features

Encryption Method

The Advanced Encryption Standard (AES) is utilized by the BlackBond to protect electronic data. The AES algorithm is a symmetric block cipher that encrypts and decrypts information.

AES is a FIPS approved symmetric encryption algorithm that may be used by U.S. Government organizations (and others) to protect sensitive information.

Key Management

Automated key management configurations ensure timely key transitions and eliminate the operational and maintenance costs of managing an encrypted network with manual key distribution.

Management

An IP Ethernet interface, with SNMP, enables ease of management, configuration, and upgradeability.

BlackBond Optional Features

T1 Protection Switch OPTION -TPS

The T1 Link Protector provides an automatic backup for T1 circuits with a second T1. The switch over criteria is configured.

T1 Link Protector OPTION -LPT

The T1 Link Protector provides an automatic backup for T1 circuits with T1 Over IP connecting via Wireless Ethernet, Gigabit Ethernet, IP Satellite Services, xDSL,...

Technical Specifications

Encryption Algorithm:

- AES 256-bit
- Fully Automatic key management

T1/Fractional T1 Specifications:

- 1 RED and 1 BLACK T1
- Integrated CSU Connects to Telco T1 or crossover to DS1
- Framing - ESF or D4 • Coding - B8ZS or AMI
- Supports DS0 assignments from 1 to 24
- Not Contiguous Configuration x-y,z Supported

LAN Network Interface:

- Two 10/100BaseT Full/Half Ethernet
- Auto negotiation or Configured Speed and Duplex

LAN Network Protocols Supported:

- IP, TCP, UDP, ICMP
- Telnet

TFTP Online Upgrade Capable (FLASH ROMs)

- BlackBond is fully operational during upgrade

Dimensions:

- Dimensions: 9" (L) x 7.3" (W) x 1.50" (H)
- Optional Medeco Case



Environmental:

- 0° to 132° F (-10° to 50°C) operating temperature
- Up to 90% operating humidity (non-condensing)
- Optional Extended Temperature Range available

Regulatory:

- CE • Safety -IEC60950 • EMC - CFR 47 Part 15 Sub Part B:2002, EN55022:1994+A1&A2, EN55024, ICES-003 1997, CISPR 22 Level A
- Telecom Part 68

Management:

- Telnet support with Edit and Paste Template Files
- Console Port for Out of Band Management
- SNMP support (MIB I, MIB II) with configured traps
- Remote config., monitoring, & reset
- Telco Diagnostics: Local Loop, Remote Loop

Power:

- 10-30 VDC, 1.0A. • Screw Locking Connector
- Universal Adapter 100/240 VAC 50/60 Hz
- Optional -48V 0.25 Amp • Hot Standby

How To Order - BlackBond T1

Part No.	Description	Notes
007-1544-02	BlackBond T1	Base Model with 1 RED and 1 BLACK T1 Port
Base Options		Specify as suffix
-TPS	T1 Protection Switch Option	Automatic T1 Circuit Backup w 2nd T1 WAN
-LPT	Link Protector Option	Automatic T1 Circuit Backup with T1OverIP
Power Options		Specify as suffix - Combine 2 for Hot Standby
-DCMOD	Power Module 12/26 VDC/AC ADAPTER	Ships with Universal Adapter 100/240 50/60
-WIREDC	Power Supply Module 12/26 VDC Screw Term	
-N48VDC	Power Supply Module Negative 48 Volt DC	Isolated Negative 48 Volt Power
Rack Mount Option		Specify as suffix
-RACKMNT	19/23" Wide Rack Mount Brackets	Enclosure Nut Serts Installed