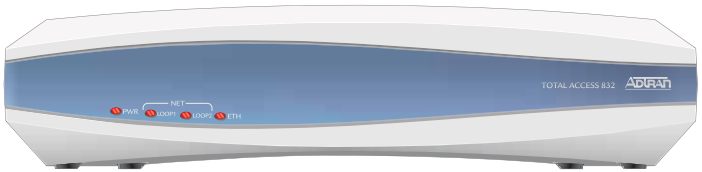
Total Access 832
SHDSL EFM NTU
P/N: 1200718L1



CAUTION!
SUBJECT TO ELECTROSTATIC DAMAGE OR DECREASE IN RELIABILITY.
HANDLING PRECAUTIONS REQUIRED.

DESCRIPTION

The Total Access 832 SHDSL EFM NTU is a Metro-Ethernet Forum (MEF) compliant, EFM bonded NTU designed for cost-effective deployment of voice and data services to small and medium size businesses supporting up to two 2-wire SHDSL loops. The Total Access 832 accepts SHDSL or eSHDSL and delivers 10/100 Ethernet for customer LAN extension. The Total Access 832 terminates the SHDSL loops in a RJ-48C connector and supports data rates from 192 kbps to 5.7 Mbps per copper pair. The Total Access 832 provides an aggregate data rate up to 11.4 Mbps over a single EFM bonded group.

FEATURES

- One integrated EIA-232 configuration port (DCE)
- One integrated 10/100Base-T Ethernet port
- Two 2-wire eSHDSL loops
- WAN Protocol: IEEE 802.3ah Ethernet in the First Mile (EFM) bonding
- Command Line Interface (CLI)
- Remote Management - EOC/CLI using Virtual Terminal, Telnet by way of Management VLAN
- Front panel LEDs
- Wall mounting hardware included
- MEF Compliant as a UNI Type 1.2

INSTALLATION AND TURN-UP

After unpacking the unit, inspect it for damage. If damage is noted, file a claim with the carrier and then contact ADTRAN. For more information, refer to the warranty.

Before installing the SHDSL EFM NTU, be sure to have the following items:

- VT100 Terminal or PC (with VT terminal emulation software)
- Straight-Through Serial Cable with a DB-9 (male) connector on one end and the appropriate interface for the terminal (or PC) on the other end

Follow the steps listed below to install the SHDSL EFM NTU.

1. Connect power to rear 12 VDC power port labeled **POWER**.
2. Connect network SHDSL to rear network port labeled **NETWORK** as shown in the WAN-SHDSL Network Pinout (RJ-45) table on reverse side.
3. Connect customer Ethernet to rear Ethernet port labeled **ETHERNET** as shown in the 10/100Base-T Ethernet Port Pinout table on reverse side.
4. Connect to the rear panel RS-232, DB-9 connector labeled **CONSOLE** to log on and provision the Total Access 832 by way of VT100 terminal or VT100 terminal emulation software such as HyperTerminal or ProComm Plus.

   Craft port defaults are as follows:

   - Data Rate: Auto
   - Asynchronous Data Format: 8 data bits, no parity, 1 stop bit, and no flow control
5. Press ENTER to activate the Command Line Interface (CLI).

NOTE: The default username and password are "ADMIN" and "PASSWORD" in all capital letters.

FRONT PANEL LEDS

Label	Status		Description
PWR	○	Off	No power present
	●	Green	Power present
NET LOOP1	○	Off	SHDSL loop 1 is disabled
	●	Green	SHDSL loop 1 is trained up and EFM group is established
	✷	Green Flashing (slow)	SHDSL loop 1 is currently training
	✷	Green Flashing (fast)	SHDSL loop 1 is acquiring EFM synchronization
	●	Red	SHDSL loop 1 is not trained up
	✷	Red Flashing	SHDSL loop 1 is in the handshake process
NET LOOP2	○	Off	SHDSL loop 2 is disabled
	●	Green	SHDSL loop 2 is trained up and EFM group is established
	✷	Green Flashing (slow)	SHDSL loop 2 is currently training
	✷	Green Flashing (fast)	SHDSL loop 2 is acquiring EFM synchronization
	●	Red	SHDSL loop 2 is not trained up
	✷	Red Flashing	SHDSL loop 2 is in the handshake process
ETH	○	Off	No Ethernet link present
	●	Green	10/100Base-T Ethernet link is up

REAR PANEL LEDS

Label	Status		Description
ETHERNET	●	Green	10/100Base-T Ethernet link is up
	●	Yellow	Ethernet activity

For more information, refer to the Installation and Maintenance Practice (P/N 61200718L1-5) available online at www.adtran.com.

SHDSL EFM NTU (Annex B)

PRICING AND AVAILABILITY 800.827.0807
TECH SUPPORT 800.726.8663
RETURN FOR REPAIR 256.963.8722
www.adtran.com
61200718L1-22A

SPECIFICATIONS

Specification	Description
Electrical	
DC Input Power:	12 VDC nominal (Minimum: 11 VDC; Maximum: 13 VDC)
Environmental	
Operating Temperature:	0°C to +50°C
Storage Temperature:	–60°C to +85°C
Humidity:	95%, noncondensing
Physical	
Dimensions:	Width: 9.3 inches Height: 2.1 inches Depth: 6.1 inches
Compliance	
EMC Emissions:	EN 55022 Class B; FCC Part 15 Class A
EMC Immunity, Power Fault, and Lightning:	EN 55024; EN 61000-3-2; EN 61000-3-3; Telstra 1563; ITU-T K.21 Enhanced
Electrical Safety:	EN 60950; AS/NZS 60950; IEC 60950
Telecom:	AS/ACIF S043.2; ITU-T G.991.2 Annex B
Connectors	
SHDSL Port:	RJ-45; 135 ohms
10/100Base-T Ethernet:	RJ-45
Console Port:	DB-9 female
Power Input:	Kycon KPJ-3S snap and lock or equivalent
Diagnostics and Test	
Self-diagnosis	

COMPLIANCE

The Total Access 832 SHDSL EFM NTU is designed to meet the following environmental classes:

- ETSI EN 300 019-1-1 “Classification of environmental conditions, Storage” - Class 1.2
- ETSI EN 300 019-1-2 “Classification of environmental conditions, Transportation” - Class 2.3
- ETSI EN 300 019-1-3 “Classification of environmental conditions, Stationary use at weather-protected locations” - Class 3.1E

The equipment is designed to function without degradation during exposure to all test severities per Class 3.1E in ETSI EN 019-1-3.

CONSOLE PORT PINOUT

Pin	Name	Description
1	–	No Connection (NC)
2	RD	Receive Data (Output)
3	TD	Transmit Data (Input)
4	DTR	Data Terminal Ready
5	SG	Signal Ground
6	–	NC
7	–	NC
8	–	NC
9	–	NC

WAN-SHDSL NETWORK PINOUT (RJ-45)

Pin	Name	Description
1	Tip 2	Loop 2 Pair Tip
2	Ring 2	Loop 2 Pair Ring
3	–	NC
4	Tip 1	Loop 1 Pair Tip
5	Ring 1	Loop 1 Pair Ring
6–8	–	NC

10/100BASE-T ETHERNET PORT PINOUT

Pin	Name	Description
1	TX1	Transmit Positive
2	TX2	Transmit Negative
3	RX1	Receive Positive
4, 5	–	NC
6	RX2	Receive Negative
7, 8	–	NC

Warranty: ADTRAN will replace or repair this product within the warranty period if it does not meet its published specifications or fails while in service. Warranty information can be found online at www.adtran.com/warranty.