



SHDSL 2w/4w Network Termination Unit

Express 6540 Series

Product Features

- Interface between the SHDSL network and the user's DTE
- 2-wire or 4-wire SHDSL network connection
- G.703 and/or Nx64k customer ports compliant with V.35, V.36, X.21, V.28, V.10, V.11, and V.24 ITU-T recommendations
- Four recessed pushbuttons for easy operation along with eight LEDs signifying operational functionality
- Tabletop size unit
- Rackmount capability in the ADTRAN Express shelf that can hold seven units
- Three varied power schemes: local AC, local DC, and span-powered with local DC power auto-switchover
- Three management options: local VT100, remote VT100, remote Network Management System

As symmetric data usage in networks increases, efficient Symmetric High Bit Rate Digital Subscriber Line (SHDSL) equipment is required in both the local loop and at the customer premises. The ADTRAN™ Express 6540™ SHDSL 2w/4w NTU Series provides the interface between the SHDSL network and the user's Data Terminal Equipment (DTE) for applications such as LAN to LAN bridging, Frame Relay circuit and PABX termination.

The Express 6540 Series operates in two different system configurations:

- As a remote unit to the ADTRAN Total Access® 3000 multiservice platforms
- In pairs as a point-to-point limited distance campus configuration

The Express 6540 Series supports the following customer interfaces and operations:

- A Nx64k single service interface with a data transmission rate of 64 kbps to 2.304 Mbps in 2-wire mode (N x 64 kbps, where N=1 to 36) or 64 kbps to 4.608 Mbps in 4-wire mode (N x 64 kbps, where N=1 to 72)
- A G.703 interface with G.704 framing, with a single or multiple G.703 services with a data transmission rate from 64 kbps to 1.984 Mbps (N x 64 kbps, where N=1 to 31)

- The G.703 interface with G.704 framing will run over SHDSL in aligned mode and support simultaneous services using the Nx64k port for the second service
- A G.703 interface without framing providing a single 2.048 Mbps service (N x 64 kbps, where N=1 to 32)

The Express 6540 Series is housed in a standalone plastic case available in AC, DC, or SHDSL span/DC powered models. The front panel provides pushbuttons for operation of local and remote port loopbacks and built-in BERT testing, and has LED status indicators for data port, loopback, and BERT conditions. The front and rear panels have been designed to accommodate specific product model requirements, including four recessed pushbuttons and eight LED indicators for the front panel, and SHDSL, G.703 and/or Nx64k customer ports, local management port, and a local power connection for the rear panels. The Express 6540 Series has the capability of being fully configured and managed by:

- A local VT100 management port
- A remote VT100 virtual terminal session via the Total Access 3000 SCU management port
- Remote NMS using the SHDSL EOC and SNMP proxy by Total Access 3000 LTU



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Product Specifications

Front Panel Features

Recessed Pushbuttons

- Port Select
- Local Loop/ERR INJ
- Remote Loop
- BERT

Tri-Color LEDs

- SHDSL
- G.703
- Nx64k
- RTS/C
- RLSL/I
- LLOOP
- RLOOP
- BERT

Mechanical

- **Dimensions:** 5.3 cm H x 23.6 cm W x 16.8 cm D
- **Weight:** Less than 1 kg
- **Mounting:** Seven units can be mounted in one ADTRAN Express Shelf

Interfaces

Network Interface

- SHDSL, 2- or 4-wire

Subscriber Interface

- G.703
- Nx64k
 - V.35
 - V.36
 - X.21
 - V.28
 - V.10
 - V.11
 - V.24

Electrical

Power Requirements AC Models

- 100 to 240 VAC, 50/60 Hz, 100 mA

Power Requirements DC Models

- -32 to -80 VDC, -48 V nominal

Regulatory Standards

- CE Mark
- A-tick (Australia)
- ETL registered
- FCC Class B

Management

- **Local Management:** VT100
- **Remote Management:** VT100 Virtual Terminal via Total Access 3000 LTU or Remote NMS using EOC and SNMP proxy by Total Access 3000 LTU

Environmental

- **Operating:** -5°C to +55°C
- **Storage:** ETS 300 019-2-1 Class 1.2
- **Relative Humidity:** Up to 90 percent, noncondensing

Ordering Information

Equipment	Part #
Express 6540 SHDSL 2w/4w NTU, AC	1230001L1
Express 6540 SHDSL 2w/4w NTU, DC	1230002L1
Express 6541 SHDSL 2w/4w NTU, AC	1230007L1
Express 6541 SHDSL 2w/4w NTU, DC	1230008L1
Express 6542 SHDSL 2w/4w NTU, E1 SPN/DC	1230009L1



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TL 9000

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