



# DS3

## Product Description

### Product Features

- Supports M13 or C-bit parity DS3 formats
- Supports G.747 E1 encapsulation
- Full time-slot assignment (TSA) supported
- B3ZS line code
- Detects and indicates DS3 alarm and loopback conditions
- Supports local or loop timing
- Provides 1:1 equipment protection switching
- Extended temperature (-40°C to +65°C)
- Provides comprehensive and easy-to-understand circuit maintenance information

ADTRAN's Total Access DS3 multiplexer module provides the Total Access 3000 or the Total Access 3010 with high-speed digital network access via a 45Mbps DS3 signal. The DS3 terminates a standard DSX-3 signal from the network and multiplexes/demultiplexes the signal into 21 E1s. It provides full time slot assignment capabilities, allowing any payload E1 in the DS3 data stream to be routed to any slot in the Total Access shelf.

The Total Access DS3 multiplexer supports simplex or redundant configurations. It supports redundancy by operating in a working/hot-standby configuration. Optional linked configuration is available from the provisioning screen, so that a second multiplexer can be provisioned automatically when changes are made to the first. If redundancy is not required, the Total Access system will operate reliably with only one DS3 multiplexer installed.

The DS3 multiplexer supports industry-standard service states, and each state is selectable using the intuitive and extensive menu structure accessible from the SCU. Timing can occur from the incoming DS3 signal, or the MUX can run on its onboard 20ppm clock. Any upgrades to the software can be uploaded from the SCU craft inter-

face. Full performance monitoring and testing, including loopbacks to the customer and the network, can be accomplished from the menu system.

The Total Access hosting the DS3 multiplexer module supports the ANSI G.747 standard for transporting E1s across a DS2. Multiplexing four DS1s or three E1s onto the same channel results in a DS2. By supporting the standard, the DS3 multiplexer can mix E1s and T1s within the same DS3 and interoperate with switches and Digital Cross Connect Systems that support the standard encapsulation.

The Total Access 3000 and Total Access 3010, ADTRAN's Carrier Class Advanced Wideband platforms, are open-architecture platforms for deploying present and future loop technologies in an ultra-dense, versatile, managed package. They can serve as Office Repeater Bays, M13 multiplexers, STS-1 or OC3 SONET multiplexers, or ISDN DLCs. Total Access supports HDSL, HDSL2, HDSL4, T1/E1, ISDN, SHDSL, DSX, and Fiber Optic loop interfaces. It is the industry's only single chassis that can simultaneously support DS3 and DSX-1, or SONET and DSX-1/E1 network interfaces.





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## Total Access 3000 DS3 Multiplexer Module

### Product Specifications

#### Mechanical

- **Dimensions:** 13.2 cm. H, 2.5 cm. W, 24.6 cm. D
- Plugs into an ADTRAN Total Access 3000 or Total Access 3010 Chassis multiplexer slot

#### Faceplate Features

##### LEDs

- Power
- Status
- Test
- Lockout
- On Line

##### Switches

- APS (automatic protection switching)
- Test/Enable

#### Electrical

##### Power Requirement

- -48 VDC and return for each power bus
- Frame ground for all metal chassis elements

##### Input Power

- -48 VDC nominal
- -42 VDC minimum
- -56 VDC maximum

#### Regulatory Standards

- NEBS Level 3
- GR-1090-CORE
- UL 1950
- IEC 950
- CE Mark
- EN 300-386-2

#### Environmental

- **Operating Temperature:** -40°C to +65°C
- **Storage Temperature:** -40°C to +85°C
- **Relative Humidity:** Up to 95 percent, noncondensing

### Ordering Information

Equipment	Part #
DS3 Multiplexer Module	1181020L1

