



# Dual OCU DP Module

## Office Channel Unit Data Port Interface for TSU Multiplexers

### Product Features

- Dual OCU DP Interfaces
- DDS or Switched 56
- 2.4 to 64k rates
- Secondary channel capability
- 4-Wire Operation
- Dual Modular 8-pin interfaces per module
- AB Signaling support
- Automatic Line Equalization
- Quality Monitor for error free operation
- Extensive built-in test capability
- 10dB TX PAD for short loop applications
- Easy configuration from TSU Front Panel, SNMP, Telnet or VT100 Terminal
- Full T-Watch PRO compatibility
- Industry-leading five-year North American warranty

**The ADTRAN® Dual OCU DP Module is an expansion module for the TSU Multiplexer Family.** Designed to provide full OCU DP operation for office applications, the module can be used to extend 64k DDS, Switched 56 or Frame Relay circuits up to 18,000 feet from the multiplexer. The Dual OCU DP Expansion module and the Dual OCU DP Plug-On module now expand the capacity of the TSU multiplexer family to support four OCU DP interfaces per expansion slot.

For CPE applications, the Dual OCU DP module allows network administrators to cut network access charges and continue to support traditional DDS/SW56 requirements. By re-using existing CPE products such as the DSU III AR, the Dual OCU DP module can extend two switched 56 circuits to a conference room to support video-conferencing. The module can also be used to extend a 56k Frame Relay circuit to FSU located in a computer room. The flexibility of the TSU multiplexer family allows Dual OCU DP operation with any of the existing modules for voice, data or routing.

The Dual OCU DP module is ideal for extending DSO's assigned over a service consolidating T1 circuit from a central access point. CLECs, LECs and IXC's can now use the

TSU 600e Multiplexer to consolidate multiple clients' 56/64k based services and maintain individual customer access. The TSU 600e, with the addition of the Dual OCU DP, can now support 24 individual OCU DP interfaces. The module is fully compliant with AT&T 62310 and 41458, allowing ease of integration and interoperability with existing OCU DP and end user CPE solutions.

For testing and trouble shooting, the Dual OCU DP module contains many built-in test functions. Several test codes are supported, including channel, OCU and DSU loop-backs. Alternating and latching loop-backs are also embedded in the module. Additionally, the TSU multiplexer family includes a full complement of test functions that allow testing of the OCU DP module, the T1 carrier and the multiplexer itself.

The ADTRAN TSU multiplexer and the Dual OCU DP module are both backed by a five-year, return to ADTRAN warranty. With the Dual OCU DP module being one of more than 50 modules available, the T1 Integrated Access solution of choice is the ADTRAN TSU multiplexer.



# Dual OCU DP Module

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## Office Channel Unit Data Port Interface for TSU Multiplexers

# Product Specifications

## OCU DP Interface

### Operating Modes

- 4-wire DDS or Switched 56

### Dedicated Rates

- 2.4, 4.8, 9.6, 19.2, 56 and 64k Clear Channel
- Secondary Channel available on all rates except 64k Clear Channel

### Switched 56 Operation

- Conforms with AT&T Pub 41458

### OCU DP Operation

- Conforms with AT&T Pub 62310

### Local Loop Signal

- Bipolar return-to-zero, 50% duty cycle

### Transmit Amplitude

- +/- 1.5 V (+/- 10%) peak, all rates except 9.6K
- +/- 0.75 V (+/- 10%) peak at 9.6K

### Transmit Source Impedance

- 135 Ohms +/-20%

### Receive Input Impedance

- 135 Ohms +/-20%

### Receiver Sensitivity/Dynamic Range

- 0 to 45 dB loop loss at all rates

### Sealing Current

- 4 to 20 mA DC

### Physical Interface

- Dual 8-pin modular connectors, on both plug-in and plug-on
- 4-wire loop interface

## Test Features

### Alternating & Latching Loop-backs

- Complies with TA-TSY-000077

### Network to Loop Test Codes:

- Zero Code Suppression
- UMC, MOS, TC, ABS
- Channel Loop-back
- OCU & DSU Loop-back
- Loop-back Enable
- Far-End Voice
- Test Alert

### Loop to Network Test Codes

- Zero Code Suppression
- DSU Loop-back

## Agency Approvals

- FCC Part 15, Class A
- UL 1950 and CUL

## Environment

- **Operating:** 0° to 50° C (32° to 122° F)
- **Storage:** -20° to 70° C (-4° to 158° F)
- **Relative Humidity:** Up to 95%, non-condensing

## Module Physical

- Standard TSU Expansion Module Form Factor: Plug-In and Plug-On
- **Weight:** 1.5 lbs

## Product Includes

- User Manual

# Ordering Information

Equipment	Part #
Dual OCU DP Expansion Module	1200230L1
Dual OCU DP Plug-On Module	1200231L1

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