OSU 300

Multiport Optical Service Unit

Product Features

- Multiport OSU (Optical Service Unit)
- Single and multi-mode fiber optics
- For distances up to 40 km on single-mode fiber and 2 km on multi-mode fiber
- Four user-configurable data ports
- Built-in HSSI (High Speed Serial Interface)
- Optional HSSI module
- Optional high-speed V.35 interface options
- Optional Quad DSX-1 module for voice integration
- Optional Bridge module for high-speed LAN-to-LAN connectivity
- Automatic or manual remote configuration
- Embedded SNMP and Telnet via Ethernet or SLIP/PPP
- Detailed performance monitoring (local and remote)
- VT100 menu structure simplifies configuration
- DC powered with optional AC adapter available
- Standard five-year warranty

The ADTRAN™ OSU 300 is a cost-effective point-to-point fiber product that supports data rates up to 44.2 Mbps, providing users up to four DTE data ports. This multiport OSU provides access to private single-mode and multi-mode fiber and allows users to share the bandwidth between multiple applications. The single-mode version has a 1310 nm laser with SC type connectors and a maximum range of 40km, while the multi-mode version has a 1310 nm LED, a maximum range of 2km and ST type connectors.

The OSU 300 has one HSSI (High Speed Serial Interface) port built into the chassis. Expansion slots for up to three additional DTE interfaces accept optional field-upgradeable interface modules. The modules can be either HSSI, high-speed V.35, DSX-1, or an Ethernet Bridge module. The HSSI ports support rates from 75 Kbps to 44.2 Mbps, while the high-speed V.35 ports support rates from 75 Kbps to 10 Mbps; both in 75 Kbps increments. Each DSX module has four DSX-1 interfaces and up to three DSX-1 modules can be supported in a chassis. The Bridge module provides four auto-sensing 10/100 BaseT Ethernet ports. Up to three modules can be supported in a single chassis. The Quad Bridge module provides LAN-to-LAN connectivity using bridging over the WAN. Additionally, this module acts as a LAN switch to provide Layer 2 Ethernet switching

between each of the ports on the module. The OSU 300 offers complete configuration, diagnostic, and performance monitoring through a VT100 terminal, SNMP, or Telnet.

A series of front panel LEDs indicate the status of the network connection, along with the state of each of the four DTE ports. SNMP traps notify SNMP management platforms of alarm conditions. External alarm contacts provide connection to a visual or audible alarm.

The OSU 300 includes VT100 terminal interfaces on both front and rear panels. Inband remote configuration to a remote unit across the fiber can be performed manually by the user, or automatically by the host OSU 300 unit. Time-of-day automatic reconfiguration allows customers to assign or reallocate bandwidth to applications based on the time of day, ensuring that the broadband circuit is always optimized.

Embedded SNMP and Telnet are available via either the 10BaseT Ethernet port or SLIP/PPP. The OSU 300 can be configured, monitored, and diagnosed using standard SNMP network management programs, such as Hewlett Packard's OpenView,™ IBM's NetView,™ and Cabletron's Spectrum.™ ADTRAN's ADVISION,™ a GUI interface for HP OpenView, can be used to manage the OSU 300, as well as other ADTRAN SNMP products.

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Product Specifications

OSU 300 Interface
Single-mode Interface
- Class 1 single-mode laser
- 1310 nm
- Up to 40 km on single-mode fiber
- SC connectors
- **Transmitter output power:** -3 dBm
- **Receiver sensitivity:** -36 dBm

Multi-mode Interface
- 1310 nm
- Up to 2 km on multi-mode fiber
- ST connectors

DTE Interface(s)
- Built -in integrated HSSI port, SCSI-II 50-pin female
- Three (3) option slots accept any combination of:

HSSI Port(s): Rate: 75 Kbps to 44.2 Mbps, SCSI-II 50-pin female

V.35 Port(s): M34 female, Rate: 75 Kbps to 10 Mbps

DSX-1 Interface: T1/FT1 rates, RJ48C, ANSI T1.403, AT&T TR 62411, SF/ESFAMI/B8ZS

Bridge Interface: Four 10/100 BaseT auto-sensing Ethernet ports, acts as a bridge for data-transport over WAN and Layer 2 switch between any of the ports on the module

- Bandwidth selectable in 75 Kbps increments
- All option cards are hot swappable

VT100 Terminal Interface
- RJ-48, EIA-232 compatible, female DB-9 adapter provided
- Inband remote configuration and statistics

Clocking
- Loop (slaved to network receive clock)
- Local (private network master)

Diagnostics
- ANSI T1.107 compatible loopbacks
- Line and payload loopbacks
- Built in BERT
- Remote loopbacks

Agency Approvals
- FCC Part 15, Class A, UL and CUL

Performance Monitoring
Local and Remote Network Port Statistics
- Current 15-minute, 24-hour (96 15-minute intervals) and total for 24 hours
- P-bit errored and severely errored seconds
- Severely errored framing seconds
- Line, P-bit, C-bit coding violations
- Line errored, unavailable seconds
- C-bit errored and severely errored seconds
- F-bit and M-bit errors
- Far-end block errors
- Percent availability

SNMP/Telnet
- Integrated 10BaseT Ethernet and SLIP/PPP (async) port
- MIB II, RFC 1213 & 1407 compliant
- ADTRAN Enterprise MIB for extended monitoring and DSU control/configuration

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

Physical
- Dimensions: 1.7" H, 11.625" D, 17" W; fits 1U 19" rack
- Weight: 5 lbs
- Power: 120 vAC or 24-48 vDC, 9 watts

Product Includes
- One 8-pin to 8-pin modular cable, modular-to-female DB-9 adapter, user manual
- 19" rackmount kit

Ordering Information

Equipment	Part #
OSU 300 DC, Single-mode, SC	1200663L1
OSU 300 DC, Multi-mode, ST	1200663L4
OSU 300 AC, Single-mode, SC	4200663L1
OSU 300 AC, Multi-mode, ST	4200663L4
HSSI Module	1200218L1
V.35 Module	1200219L1
Quad DSX-1 Module	1200284L1
Quad Bridge Module	1200655L1
23" Rackmount Kit	1200171L1
AC to 48 Volt DC Converter	1202470L1