Total Access 5000 SM40 4x10GE

Switch Module

IP/Ethernet is rapidly advancing as the primary protocol for delivering voice, video and data services in the network.

The ADTRAN® Total Access® 5000 SM40 4x10 Gigabit Ethernet (10GE) Switch Module enhances the already robust, carrier-class switching capability of the ADTRAN Total Access 5000 Multi-Service Access and Aggregation Platform (MSAP) by offering multiple 10GE network and ring interfaces.

With the ability to be deployed in both Central Office (CO) and Remote Terminal (RT) locations, the SM40 4x10GE Switch Module provides flexible network deployment options, easily scaling to support applications such as Enhanced Broadband, IPTV, Voice over IP (VoIP), Metro Ethernet and service aggregation using 10G Network Interfaces and Ethernet Ring Protection Switching (ERPS) support for network transport.

The Total Access 5000 SM40 4x10GE Switch Module provides four flexible interfaces on the faceplate which can be used in a variety of ways depending on application needs. All four interfaces are innovative Small Form Factor Pluggable Plus (SFP+) optical standard supporting both 1GE and 10GE rates based upon the appropriate SFP in use. In addition, ports of the same speed may be configured to support (IEEE 802.1AX link aggregation) to increase the bandwidth between nodes or toward the core network.

The Total Access 5000 SM40 supports ITU G.8032 ERPS which provides network operators with the ability to create resilient 1 Gbps or 10 Gbps Ethernet rings with multiple Total Access 5000 Nodes. ERPS gives operators the ability to increase their network footprint and size while maintaining a single access point to their IP/Ethernet core.

To support the increased capacity of the technologies being used in the access slots of the Total Access 5000, such as GPON and Active Ethernet, the SM40 4x10GE Switch Module supports high capacity switch fabric and provides non-blocking connectivity to every access module slot. The increased capacity of the switch fabric for the Total Access 5000 SM40 4x10GE Switch Module allows operators to scale both network and subscriber bandwidth for years to come—without a forklift replacement. The SM40 4x10GE Switch Module is supported in all currently deployed Total Access 5000 and Total Access 5006 systems and is backward compatible with all existing Total Access 5000 access and line modules.

Like all Total Access 5000 Switch Modules, the SM40 4x10GE provides traffic management features to support differentiated quality of service as well as enhanced security features to protect user data from external attacks. This switch module can be deployed either simplex or redundant, with sub-100 ms failover times to support even the most critical traffic.

Local Command-line Interface (CLI) and menu management is achieved through Ethernet or VT100 terminal emulation (RS-232) using the System Controller Module (SCM). Remote management is available through Telnet or SNMP using management Virtual Local Area Networks (VLANs). The ADTRAN Advanced Operational Enviroment (AOE), a comprehensive management platform for the Total Access product line, also can be used to manage both the Total Access 5000 and the SM40 4x10GE Switch Module.
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Product Specifications

Interfaces

Network Interfaces
- Four 10GE or 1GE interfaces via SFP+ connectors
- ITU G.8032 ERPS support fast failover
- IEEE 802.1AX Link Aggregation

Physical
- Requires SMIO3 Switch Module Input/Output

Quality of Service Management and Security
- IEEE 802.1p priority bits
- IEEE 802.1Q VLAN tagging
- Eight strict priority queues
- Full range of VLAN ID support
- Support for 1:1 and N:1 VLAN topologies
- Network and subscriber proxy ARP
- MAC address to port binding
- PPPoE with Intermediate Agent
- Layer 2 DHCP Relay with Option 82

Management
- System CLI and Web through system controller module
- Remote management through SNMP and TL1
- Supported by ADTRAN AOE/EMS

Environmental
- Operating Temperature: -40°F to 149°F (-40°C to +65°C)
- Storage Temperature: -40°F to 185°F (-40°C to +85°C)
- Relative Humidity: Up to 95% at 122°F (50°C), noncondensing

Mechanical
- Dimensions: 9.25 in H x 0.97 in W x 9.25 in D

Ordering Information

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<th>Part #</th>
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<td>Total Access 5000 SMIO3 I/O</td>
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<tr>
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