

Tellabs® 7345 Ethernet Aggregation Switch

10 Gigabit carrier-class Ethernet switch for cost-effective Ethernet transport and service delivery.

Overview

The Tellabs® 7345 Ethernet Aggregation Switch is a carrier-class Layer 2 switch supporting delivery of business Ethernet, broadband data and Internet access services in a cost-effective platform. The Tellabs 7345 Ethernet switch supports metro Ethernet networking with the latest Ethernet Operations, Administration and Maintenance (OAM) capabilities and comprehensive traffic management features. With 10 Gbps (10G) Ethernet interfaces, the Tellabs 7345 Ethernet switch efficiently supports the rapidly increasing bandwidth requirements of today's networks.



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The Tellabs 7345 Ethernet switch is part of the Tellabs® 7300 Metro Ethernet Switching Series and an integral component of Tellabs® Carrier Ethernet Solutions. You can use the versatile Tellabs 7345 Ethernet switch in combination with other Tellabs products to design, scale and deliver networks that cost effectively and reliably meet your users' varying service needs:

- Build highly scalable connection-oriented Ethernet and Carrier Ethernet networks with the Tellabs® 7100 Optical Transport System
- Extend Ethernet services from IP/MPLS core networks with the Tellabs® 8800 Multiservice Router series
- Offer expanded Ethernet services in access networks with the Tellabs® 1000 Multiservice Access Platform series
- Expand Ethernet service options in mobile backhaul networks with the Tellabs® 8600 Managed Edge System series

Features

- Small footprint providing up to 88 Gbps (88G) throughput in only two Rack Units (RU)
- Interface support for 10 Mbps through 10G Ethernet
- Flexible deployment configurations with XFP/SFP-based interfaces
- Multiple service profiles supporting a range of service offerings
- Full Ethernet OAM capabilities for service monitoring and verification
- Integrated management promotes a seamless fit with Tellabs 7100 OTS and the Tellabs 8800 MSR series networks
- Temperature-hardened
- Redundant power supplies

The Tellabs 7345 Ethernet switch is an 88G Ethernet switch in a small 2RU shelf that supports the latest carrier class requirements for Ethernet networking. This product is an optimal solution for aggregation offices in which service providers want to dramatically increase the bandwidth in the network at competitive price points, while also leveraging the carrier class design for operational efficiency and network reliability.

Sophisticated services are supported with extensive traffic management and Quality of Service (QoS) features. Classification of traffic is supported with a range of Layer 2 and Layer 3 options including port, Media Access Control (MAC), Virtual Local Area Network (VLAN) ID and Differentiated Services Code Point (DSCP). Dual rate policing with tri-color marking supports enforcement of conformance to a service contract, as well as a means to manage traffic allocation in the network. Class-based queuing with strict priority and deficit-weighted round robin scheduling options enable service providers to provide the appropriate fairness algorithms for provided services.

Carrier-class OAM capabilities comply with the latest industry OAM standards. The Tellabs 7345 Ethernet switch supports 802.3ah link-layer OAM, 802.1ag Ethernet connectivity fault management and ITU-T Y.1731 end-to-end OAM. These capabilities support rapid notification of network faults while providing a reporting mechanism to help ensure that Service Level Agreements (SLA) are being met.

The Tellabs 7345 Ethernet switch is offered in a pluggable chassis that supports redundant and non-redundant configurations, allowing service providers to determine the level of reliability the network will support. Network resiliency is supported via Multiple Spanning Tree Protocol (MSTP) and Rapid Spanning Tree Protocol (RSTP) and link resiliency is supported with link aggregation.

The Tellabs 7345 Ethernet switch supports network scalability. With its large switch fabric, the high-density nature of the Tellabs 7345 Ethernet switch will support present and future bandwidth demands in network aggregation and distribution layers. Sophisticated traffic management and QoS capabilities support a multitude of services — mobile backhaul, xDigital Subscriber Line (xDSL), Voice over Internet Protocol (VoIP), Internet Protocol Television (IPTV), etc. — that exist in service providers' networks and help ensure that each service is given the required priority for a high-quality, reliable end user experience.

Specifications

Ethernet

- 24/48 SFP-based 10/100/1000 Mbps ports and 2/4 10GbE XFP
- 802.1D — MAC bridging
 - STP/RSTP
- 802.1Q — VLAN Bridging
 - MSTP
- 802.1ad — Provider Bridging
 - VLAN Switching/ stacking
 - Q-in-Q support
- 802.3ad — Link Aggregation Control Protocol (LACP)
- 802.3ah — Link OAM
- 802.1ag — Ethernet Connectivity OAM
- Y.1731 — Service Layer OAM
- Jumbo frames

Management

- IPv4
- Secure Shell (SSH)
- In-band management VLAN
- Simple Network Management Protocol Version 2 (SNMPv2)
- Simple Network Management Protocol Version 3 (SNMPv3)
- Command Line Interface (CLI)
- Remote Monitoring (RMON) — RFC 2819
- Network Time Protocol (NTP) — RFC 1305
- Craft station GUI (Tellabs® 7191 Craft Interface)
- Remote Authentication Dial In User Service (RADIUS)

Traffic Management and QoS

- Layer 2 and Layer 3 traffic classification
- Single Rate Three Color Marking (srTCM) — RFC 2697
- Two Rate Three Color Marking (trTCM) — RFC 2698
- Eight classes of service per port
- Flexible scheduling – strict priority and deficit-weighted round robin
- Port-level and class-level traffic shaping
- Color-aware policing

Other

- 32K MAC addresses
- 4K VLANs
- 1K Multicast groups
- Port mirroring
- VLAN mirroring

Security

- Access control lists
- Control protocol filtering
- User login access rights

Service Support

- E-LINE
- Ethernet Local Area Network (ELAN)
- Metro Ethernet Forum (MEF) User Network Interface(UNI) Type 1
- MEF 9 and 14 certification

Physical and Environmental

Dimensions

- Height: 3.5 in. (8.9 cm)
- Width: 17.5 in. (44.5 cm)
- Depth: 11.0 in. (27.9 cm)
- Weight: 17 lbs. (7.71107 kg), including redundant switch and Power Supply Unit (PSU)
- 19-inch NEBS-compliant rack

Operating Temperature and Humidity

- -40° F to +149° F (-40° C to +65° C)
- 0% – 95% Relative Humidity (non-condensing)
- ETSI EN 300 019-1-3

Storage Temperature

- -40° F to 158° F (-40° C to +70° C)
- ETSI EN 300 019-1-1

Power Specifications

- -38V to -72V DC input power
- 100V to 240V AC

Regulatory

- FCC Part 15, Class A
- Transportation ETSI EN 300 019-1-2
- Ethernet UNI Type 1 (MEF 13)
- Ethernet Services Definition (MEF 6 and MEF10.1)
- UL 60950 1st Addition
- NEBS Level 3
- RoHS
- China RoHS
- DOT-WM_333
- WEEE



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