SKU: 81.11C-ESU32-R5
Category: Cards/Units

Ethernet Switching Unit Thirty-Two (ESU32)

The ESU32 is engineered to support most critical enterprise business services and applications in the private sector, government, hospitality, healthcare and education markets. It supports higher-level IP functionality (both IPv4 and IPv6) with full IEEE protocol support, including efficient user-to-user and machine-to-machine communication with Ethernet Bridging and powerful VLAN architecture that supports a converged network (voice, data, video, and any device with an IP address). In addition, Layer-2 through Layer-4 Access Control Lists (ACL) for enterprise network security and full IEEE 802.1x are supported. Quality of Service (QoS) is supported at the port level to provide required traffic segmentation/classification, rate limiting (shaping), queue management (buffering) and scheduling (policing) mechanisms.

Features

- •Switch engine for Tellabs OLT6
- •164 Gbps switching capacity
- •48GbE in network connectivity
- •4,096 VLANs
- •32,000 MACs
- •1,024 Multicast flows

Highlights

Scalability

Tellabs FlexSym ESU32 comes equipped with four Gigabit Ethernet and two 10-Gigabit Ethernet network uplink interfaces. These 1 GbE and 10 GbE ports are integral to the Ethernet switching fabric, common control and timing mechanism of the Tellabs OLTs.

Advanced IP and Ethernet

Tellabs FlexSym ESU32 allows for efficient delivery of modern enterprise services and applications (both IPv4 and IPv6), including the management of subtended powered devices like VoIP phones, Wi-Fi WAPs and IP cameras. Quality of Service (QoS) is provided through traffic segmentation, traffic classification, rate limiting (shaping), queue management (buffering) and scheduling (policing).

Stability

Tellabs FlexSym ESU32 offers high availability via Link Aggregation (LAG) and Rapid Spanning Tree Protocol (RSTP) for dual homing to core routers.

Security

Tellabs FlexSym ESU32 advanced security is maintained through the regimented support of Network Access Control (NAC), IEEE 802.1x, RADIUS, MAC Authentication Bypass (MAB), Dynamic ARP Inspection (DAI) and DHCP. Additional security functions include Access Control List (ACLs) implemented at Layer-2, Layer-3 and Layer-4 triggers.

Specifications

Physical

- •Weight: 1.1 lb/.49 kg
- •Depth: 9.2 in/23.4 cm
- •Width: .87 in/2.2 cm
- •Height: 10.8 in/27.4 cm

Interfaces

- •1GbE SFPs: Four (4) SFPs (sold separately)
- •10GbE XFPs: Two (2) XFPs (sold separately)

Power

- •Max draw: 50 W

Environmentals

- Altitude: -200 ft/-61 m to +10,000 ft/+3 km
- Temperature: -40°F/-40°C to +158°F/+70°C
- Relative humidity: 5% to 95%, noncondensing

Compliance

- Department of Defense Joint Interoperability Test Command (JITC)
- NEBS Level 3 compliant
- FCC Part 15 Class A
- UL 60954
- NEC 2006
- ANSI 323
- SR-3580 Issue 5
- GR-63 Issue 6
- GR-78-CORE Issue 5
- GR-295-CORE Issue 5
- GR-418-CORE Issue 6
- GR-487 Issue 6
- GR-909-CORE Issue 6
- GR-1089 Issue 7

IP/Ethernet Network

- Total MACs: 32,000
- Multicast Flows: 1,024
- Total VLANs: 4,096
- Change of Authorization (ForeScout CounterACT, Juniper Unified Access Control (UAC), Cisco Identity Services Engine (ISE), HP/Aruba ClearPass Policy Management and Microsoft Network Policy Server (NPS))
- Syslog: RFC 5426
- Priority Queuing: RFC 1048
- IGMPv3 Snooping and Proxy: RFC 3378 and RFC 2238
- 10 Gigabit Ethernet: IEEE 802.3ae
- Gigabit Ethernet: IEEE 802.3z
- Port-based Network Access Control: IEEE 802.1X
- Dynamic ARP Inspection (DAI)
- Radius Configurations: IEEE 802.3x
- Flow Control: IEEE 802.3x
- Port Authentication Entity: IEEE 802.1X
- Link Aggregation Protocol: IEEE 802.3ax
- LLDP/LLDP-MED: IEEE 802.1AB
- Ethernet: IEEE 802.3
- IPv4 and IPv6
- SNMP Agent
- Access Control Lists (ACL)
- Private VLAN support
- MAC Authentication Bypass (MAB)

- •Virtual LANs: IEEE 802.1Q
- •Traffic Classification: IEEE 802.1p
- •Multiple Spanning Tree Protocol (MSTP): IEEE 802.1s
- •Rapid Spanning Tree Protocol (RSTP): IEEE 802.1D

LED Indicators
- •XFP 1-2 Link and Loss
- •SFP 1-4 Link and Loss
- •STAT
- •ACT

Management
- •Tellabs Panorama PON Manager
- •RS-232 Craft port
- •Ethernet Craft port

Software Support
- •Minimum base software SR27 and higher
- •Holds two versions of software with image integrity checking and automatic rollback
- •Tellabs Panorama PON Manager

Installation
- •Mounting: OLT6, OLT1134 and OLT1134AC

Ordering Information
- •Tellabs FlexSym ESU32: 81.11C-ESU32FS
- •SFPs and XFPs are ordered separately
- •1000Base-SX with LC/MM connector (850nm with up to 550 meter reach): SFP 128211
- •SFP 1000 Base-SX and LC/SM connector (1310nm and 10 kilometer reach): C.11T-S1GBELX1131S
- •SFP 1000 Base-LX and LC/SM connector (1310nm and 40 kilometer reach): 81.11T-S1GB40KM-R6
- •SFP 1000 Base-T and RJ-45 (Up to 100 meters reach): C.11T-S1GBER450030
- •XFP 10GbE with LC/MM connector (850nm with up to 550 meter reach): C.11T-XO192SR1851M
- •XFP 10GbE with LC/SM connector (1310nm with up to 10 kilometer reach): 4195098
- •XFP 10GbE with LC/SM connector (1550nm with up to 40 kilometer reach): C.11T-8800-XFP-IR2

General

The development, release, and timing of features or functionality described for Tellabs' products remains at Tellabs' sole discretion. The information that is provided within this data sheet is not a commitment nor legal obligation to deliver any material, code or functionality.