SKU: 0120-0168
Category:

Gigabit Ethernet Transceiver 222 (GbE222)

The Gigabit Ethernet Transceiver (GbE222) is a high-bandwidth, cost-effective Gigabit Ethernet uplink and inter-terminal transport interface for the Tellabs 1000 MSAP. The GbE222 installs into the Tellabs 1000 MSAP to support voice transport (GR-303, GR-08, GR-57 and SIP), Ethernet traffic aggregation for High Speed Internet (HSI), IP Television (IPTV), business premises applications and cell site base station traffic backhaul.

Features

- Traffic management on a per flow basis
- Dynamic MAC learning with support for up to 8,000 MAC addresses
- 4096 VLANs (802.1q) and stacked VLAN support (IEEE 802.1ad)
- Retain, add, modify and remove subscriber VLAN (C-Tag) and network VLAN (S-Tag)
- Queuing priority (IEEE 802.1p) and mapping to Asynchronous Transfer Mode (ATM) Quality of Service (QoS) traffic profiles
- Data services such as Transparent LAN Service (TLS)
- Multicast support with IGMP Snooping and Proxy for IGMPv2 and IGMPv3
- Dual memory for minimal service interruption during programming/software upgrades

Highlights

Flexible Ethernet Transport

The Tellabs GbE222 plug-in card provides point-to-point inter-terminal transport between Central Office (CO) based Local Exchange Terminals (LET) and Remote Subscriber Terminals (RST) located in non-environmentally controlled cabinets or huts. It can also act as the Ethernet data and internet uplink to the Wider Area Network (WAN) edge or metro switch. The GbE222 provides two (2) Gigabit Ethernet ports equipped with optional configurations of 1000-Base-SX Small Form-factor Pluggable (SFP) and 1000-Base-LX SFP optics.

High Availability

Redundancy is supported with the implementation of Link Aggregation (IEEE 802.3ad LAG) at both card level and per port level.

Standards-Based Ethernet

Standards-based Ethernet is support with VLAN tagging per IEEE 802.1q, prioritization per IEEE 802.1p and Transparent LAN Services (TLS) when used with ES10/100 plug-in card. Jumbo Ethernet frames supported up to 2,000 bytes Maximum Transmission Unit (MTU). And, Service Level Agreements (SLA) capable with Committed Information Rate (CIR) and Committed Burst Size (CBS).

Specifications

Physical

- Height:5.125 in (13.018 cm)
- Width:0.563 in (1.429 cm)
- Depth:10.5 in (26.67 cm)
- Weight:0.5 lb (0.23 kg)

Interfaces

- Two (2) 1000 Mbps Ethernet
- 1000Base-SX SFP (LC connectors) ordered separately
- 1000Base-LX SFP (LC connectors) ordered separately
- 1000Base-ZX SFP (LC connectors) ordered separately

Power Consumption

- Maximum power consumption:32 W

- Typical power consumption:18.2 W

Environmentals

- Temperature:-40° to +167° F (-40° to +75° C)
- Relative Humidity:5-95% noncondensing
- Altitude:Up to 10,000 feet

Compliance

- GR-63-Core
- GR-57-Core
- GR-1089-Core
- Restriction of Hazardous Substances Directive (RoHS)

General

- IETF RFC 826 Address Resolution Protocol
- IETF RFC 2684 Multiprotocol Encapsulation over ATM
- RFC 2819 Ethernet Traffic Statistic
- RFC 3376 Managing Multicast Forwarding
- IEEE 802.3x Flow Control
- IEEE 802.3ah Carrier Sense Multiple Access Collision Detection (CSMA/CD)
- IEEE 802.3u CSMA/CD 100BASE-T
- IEEE 802.1D Media Access Control (MAC) Bridges
- IEEE 802.3z Gigabit Ethernet Physical Layer
- IEEE 802.1p Priority Queues
- IEEE 802.1Q VLAN
- IEEE 802.3ad Link Aggregation
- TR-101 Migration to Ethernet-based DSL Aggregation

LED Indicators

- FAIL (red)
- ACTIVE (green)
- LINK 1 (green)
- LINK 2 (green)

Management

- Craft User Interface (CUI)
- Tellabs Panorama Element Management System (EMS)

Software Support

- Minimum base software FP16 and higher

Installations

- Supported in Tellabs 1000 CBA

Ordering Information

- GbE222: 0120-0168
- 1000Base-SX SFP: 0410-0447
- 1000Base-LX SFP: 0410-0448
- 1000Base-ZX SFP: 0410-044x