



SKU: 0110-0269

Category:

## **Ethernet Service 10/100 (ES10/100)**

The Ethernet Service 10/100 plug-in card (ES 10/100) can deliver Ethernet services to business premises, Multiple Dwelling Units (MDUs) and cell site base stations. The ES 10/100 is supported in the Tellabs 1000 Multi-service Access Platform (MSAP) and can be located in any of the multi-purpose shelf slots.

## Features

- Supports two independent 10/100 Mbps Ethernet interfaces in a single slot
- Provides up to 200 Mbps of bi-directional traffic per card
- Both fiber-based and copper-based SFP options
- Single-mode and multi-mode fiber
- Upstream rate limiting
- Dual memory support for upgrades

## Highlights

### End-to-End Ethernet

Used in conjunction with Gigabit Ethernet Transceiver (GbE222) card in transport and network uplink configurations, the Tellabs

1000 MSAP can deliver end-to-end Ethernet interfaces. Even better, these Ethernet-based interfaces can be deployed without abandoning revenue-generating legacy Time Division Multiplexing (TDM) and Special Services that are delivered simultaneously from within the same Tellabs 1000 MSAP shelf.

### Ethernet, ATM and TDM Interworking

Asynchronous Transfer Mode (ATM), TDM and Ethernet interworking is achieved with ATM-to-Ethernet Connection (AEC), Ethernet-to-Ethernet Connection (EEC) and Ethernet-to-ATM Connection (EAC) supported across the Tellabs 1000 MSAP system.

### 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 GbE222 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).

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## 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) 10/100 Mbps Ethernet

- Short Range 100BASE-FX optics SFP ordered separately
- Long Range 100BASE-LX10 optics SFP ordered separately
- Copper 100BASE-T SFP ordered separately

**Power Consumption**

- Maximum power consumption:13 W
- Typical power consumption:9.6 W

**Environmentals**

- Temperature:-40Â° to +167Â° F (-40Â° to +75Â° C)
- Relative Humidity:5âœ95% 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**

- ES10-100: 0110-0269

- Short Range 100BASE-FX optics SFP: 0410-0464
- Long Range 100BASE-LX10 optics SFP: 0410-0463
- Copper 100BASE-T SFP: 0410-0465