

Tellabs® 1000 Multi-Service Access (MSA) Series

Tellabs® DS-3 CES Card for ONT Hi-Caps

Overview

The Tellabs® DS-3 CES (Circuit Emulation Service) card was developed for the Tellabs® 1000 MSA series FTTP platform to support Hi-Cap T-1 business services. This is a single-slot plug-in module providing efficient transport of Hi-Cap T-1 services from business ONTs to the service provider. This module is designed to work with the Tellabs® 1600 series Small Business Unit (SBU) ONT and Multi-Tenant Unit (MTU) ONT.

The new DS-3 CES standards based (ATM Forum) circuit emulation service using Unstructured Data Transfer (UDT). The DS-3 CES card provides an M13-mapped T-3 interface for a more cost-effective interface to an M13 DCS in the central office. The card enables aggregation of up to 28 ATM encapsulated T-1 Hi-Caps.

The DS-3 CES card can be used in any of the 22 general purpose slots in a Tellabs 1020 CBA. There is a limit of two pairs of DS-3 CES cards per system with each pair representing a protection group. The Tellabs 1000 MSA series supports 1:1 DS-3 CES plug-in card redundancy using a pair of mini coaxial "Y" pigtail cables (linking the redundant cards together) to provide failure switchover protection. Both cards in a redundant pair must reside in the same shelf.

The DS-3 CES plug-in card provides a full 44.736 Mbps metallic interface using 75 Ohm coaxial cable runs of up to 450 feet (137 meters). It uses B3ZS line coding and terminates a standard DS-3 signal. The card is compatible with third-party DS-3 multiplexers which support C-Bit parity framing.

Features and Benefits

- M13 mapped T-3 service
- Enables aggregation of up to 28 T-1 Hi-Caps
- Redundancy with automatic or manual switchover
- Supports DS-1 Unstructured Service (af-vtoa-0078.00)
- Transmission rate of 44.736 Mbps
- Coaxial line build out of up to 450 feet (137 meters)
- Provisionable loopback support
- Supports the C-bit parity DS-3 frame structure as defined in Section 9.3 of ANSI T-1.107-1995
- Equipped with Mini-SMB connectors for terminating the facility interface
- Dual-memory support for upgrades

Signaling

- Framing: SF, ESF or Unframed
- Line coding: B3ZS
- Line rate: DS-3 (44.736 Mbps)
- Line build out: 0 to 225 ft or 226 to 450 ft
- Loopback modes: Line (facility), Internal (equipment)
- Timing: Provisionable as Loop or Internal

Analog Parameters

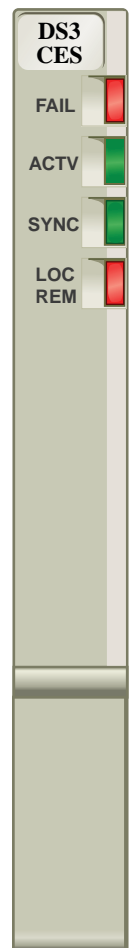
- Input impedance: 75 Ohm, coaxial

Distance

- Maximum distance (no repeaters): 450 ft

LEDs on the faceplate of the DS-3 CES indicate:

- ACTV (solid green): D-3 is active and can carry traffic
- ACTV (flashing green): card is in loopback
- FAIL (solid red): card is unable to communicate
- SYNC (solid green): valid DS-3 synchronization
- LOC REM (solid red): card has detected an error on incoming



Specifications

Environmental

- Operating temperature:
-40° C to +65° C (-40° F to +149° F)
- Humidity (relative): 5–95% non-condensing
- Typical power consumption: 8 W

Physical

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

Ordering Information

- DS-3 CES 0120-0154 DS3-CES CHANNELIZED FTTP HiCap

How to reach us

North America

Tellabs
One Tellabs Center
1415 West Diehl Road
Naperville, IL 60563
U.S.A.
+1 630 798 8800
Fax: +1 630 798 2000

Asia Pacific

Tellabs
3 Anson Road
#14-01 Springleaf Tower
Singapore 079909
Republic of Singapore
+65 6215 6411
Fax: +65 6215 6422

Europe, Middle East & Africa

Tellabs
Abbey Place
24-28 Easton Street
High Wycombe, Bucks
United Kingdom
HP11 1NT
+44 870 238 4700
Fax: +44 870 238 4851

Latin America & Caribbean

Tellabs
1401 N.W. 136th Avenue
Suite 202
Sunrise, FL 33323
U.S.A.
+1 954 839 2800
Fax: +1 954 839 2828

The following trademarks and service marks are owned by Tellabs Operations, Inc., or its affiliates in the United States and/or in other countries: TELLABS®, TELLABS and T symbol®, T symbol®.

Any other company or product names may be trademarks of their respective companies.