

# Tellabs® 1000 Multi-Service Access (MSA) Series Digital Loop Carrier Channel Bank Assembly

## Overview

The Tellabs® 1000 Multi-Service Access Series products maximize broadband capabilities in the access network, enhancing the foundation for emerging services. The Tellabs 1000 MSA System, which includes Digital Loop Carrier Channel Bank Assembly (CBA). With simple in-service upgrades, service providers obtain the capacity and Quality of Service (QoS) to support virtually 100% of their broadband users. The Tellabs 1000 supports a vast number of technologies including any transport, copper, wireless, SONET/SDH, ATM, IMA transports, in any network, from TDM to ATM. Using one or more CBAs, the Tellabs 1000 is cost-effective from one to over 2000 DSL and POTS lines using Tellabs 1000 MSA plug-ins, and is compatible with current and future public switched network infrastructures. These features push its capabilities beyond those of traditional subscriber multiplexers and remote DSLAMs.

## Advanced Design for xDSL

The Tellabs 1000 has an enhanced backplane design with a thermal design that accommodates forced air convection to dissipate the heat generated by a 100% xDSL fill rate. Targeted at potential DSL subscribers now outside the reach of the CO, the Tellabs 1000 can serve 100% of potential DSL subscribers in urban, suburban and rural markets, while utilizing existing backhaul facilities including T-1/E-1 or HDSL, copper plant, fiber, or wireless.

The Tellabs 1000 MSA system utilizes two basic network elements, the Local Exchange Terminal (LET) in the central office and the Remote Subscriber Terminal (RST) located at the other end of the transport media. Supported transports include fiber optic, T-1/E-1, ADSL/HDSL, HDSL2, HDSL4 and OC-3c/STM1c. Supported configurations include Point-To-Point, Star, Ring, Drop and Insert, and Tree topologies using up to 32 remote terminals.



Tellabs® Multi-Service Access Series

## Constructed for Flexibility

The Tellabs 1000 MSA CBA has 26 slots that include four integrated common-control slots for processing and power plug-ins, and 22 general-purpose slots that support any narrowband or broadband Tellabs 1000 plug-in. The system is expanded quickly and easily by adding one or more Tellabs 1000 CBAs linked to the primary CBA by fiber optic cable. Consisting of a preformed, cold rolled steel card cage, metal rear covers, printed circuit board backplane, and mounting hardware, the Tellabs 1000 CBA includes all hardware necessary for installation except the actual cables that carry voice, data, and power. An optional front cover is available for applications needing FCC Class B compliance with Electro Magnetic Interference (EMI) requirements. The Tellabs 1000 can be provisioned and monitored using the craft interface and/or from a menu-driven software provisioning system accessible from any Local Exchange Terminal (LET), Remote Subscriber Terminal (RST), or remote Telnet session. To further simplify provisioning and monitoring, use the Tellabs® 1090 Network Management System (NMS). The NMS utilizes graphical user interfaces coupled with powerful databases to quickly and easily perform provisioning and monitoring for an entire network.

## Benefits and Features

- Supports with traditional narrowband and wideband services
- Provides ATM concentration over any existing transport
- Capable of 100% xDSL fill rate
- Rapid deployment from any existing cabinet
- Full NMS control integrates existing access networks
- Alarm contact closure wire-wrap posts
- System timing inputs using wire-wrap posts
- Optional cable adapter kits for connector translation
- On-board craft port with A/B switch for modem interface
- Power fan assembly

## Specifications

### *Compliance*

- NEBS Level 3 Compliant

### *Materials*

- Cold rolled steel — Zinc plated per ASTM-B633 Type II (Gold) SC2

### *Powering*

- -42 to 60 V DC @ 10 Amps maximum

### *Environmental*

- Operating temperature:  
-40° C to +65° C (-40° F to +149° F)
- Storage temperature:  
-40° C to +70° C (-40° F to +158° F)
- Humidity: 5–95%, non-condensing

### *Mounting (Stacked configuration)*

- Environmentally-hardened enclosure with 7 vertical in (17.8 cm) of 19- or 23-inch (48.260 cm or 58.420 cm) wide rack-mount space

### *Dimensions*

- Height: 7 in (17.8 cm)
- Width: 19 in (48.2 cm)
- Depth: 12 in (30.5 cm) (with connectorized CBA 12.875 in / 31.4 cm)

### *Weight*

- 14.4 lbs (6.5 kg) connectorized

### *Physical*

- 26 total slots — 4 integrated common-control, 22 general-purpose

### *CBA Backplane Options*

- Wire-wrapped or connectorized for RJ21, MS2, or 710