# Access Bank I

# **Carrier-class Channel Bank**



# Easily provision varied analog voice services from T1

## Compact device converts digital services to analog circuits

The Access Bank® I is an economical, compact device for converting T1 digital access services to 12 or 24 individual analog telephone circuits. Six different types of 12-channel and 4+8 channel telephone line interface cards provide a variety of analog line services, including:

• BRFXS • DPO • DPT • E&M • FXO • FXS • FXSDN • PLARD • SPOTS • TO

The Access Bank I automatically adapts to changing line conditions, providing a clear, echo-free transmission path at all times.

# Minimize deployment time

Designed for speedy deployment, the Access Bank I provides installation instructions right on the case. Configuration is done via DIP switches and self-test routines to ensure that all circuits are operable. The design incorporates an integrated CSU, allowing direct T1 line connection and monitoring.

In-service maintenance capabilities include hot-swappable line cards, channel LEDs and fuseless protection of all interfaces. A remote management option with Windows® GUI software and built-in modem is also available.

#### **Direct connection to full CLASS features**

The Access Bank I TR-08 option offers direct digital T1 connection to Class 5 local switch interfaces, eliminating the need for analog conversion of line connections at the Central Office. TR-08 signaling can be provisioned for physically separate shelves. Unlike trunk-side T1 switch connections, line-side TR-08 connections supply full CLASS® features directly to customer phone lines.

#### Features At-A-Glance:

- Supports carrier-class service delivery with on- and off-premises wiring, automatic line balancing and full power ringing
- Printed instructions on the case allow easy provisioning and servicing with minimal training
- Low power consumption with -48 VDC inputs and AC charger with economical eight-hour battery backup option
- Compact size (1 RU), wall or rack-mount allows convenient space-saving installations
- · Fuseless line protection, fanless cooling and solid-state signaling increase service availability
- TR-08 software option supplies direct customer connection to CLASS features





# Technical Specifications

#### Management:

- Optional remote Windows-based GUI management with built-in modem
- Front panel T1 test switches and status LEDs
- Back panel analog channel option, test switches, and status LEDs
- Built-in T1 self-test and telephone line ringing and tone tests

#### Digital T1 Interface:

- Terminates 1.536 Mbps (24 channels) of usable bandwidth
- Integrated intelligent CSU: DS1 or DSX-1 signal levels from 0 to –30 dB
- D4 (SF), ESF framing, and SLC-96 framing with TR-08 option
- AMI or B8ZS line coding
- Clock source: Enhanced Stratum 4 (master) or synchronized to T1 line Telcordia™ TR-08 shelf, A, B, C, or D function (optional)

# Analog Interfaces:

- FXS 12-channel card: Supports CLASS features; provides loop-start, ground-start, E&M signaling conversion and calling party disconnect
- BRFXS/DPO 12-channel card: Supports CLASS features; operates as a Battery Reversal FXS loop-start card (BRFXS) or a Dial Pulse Origination (DPO) card FXO/DPT 12-channel card: Supports CLASS features; operates in FXO loop or ground-start signaling or Dial Pulse Terminate (DPT) signaling; E&M signaling conversion and calling party disconnect
- 4 FXO + 8 FXS modular voice card: Supports 4
  FXO/DPT circuits and 8 FXS circuits as described
  above

- 4-Wire E&M /TO 12-channel card: Supports signaling types I, II, IV or V; uses up to 4 signaling and transmission pairs per channel (E/M, SG/SB, T/R and TI/RI)
- 2-Wire E&M/TO 12-channel card: Supports signaling types I, II, IV or V; uses up to 3 signaling and transmission pairs per channel (E/M, SG/SB and T/R)
- Patented automatic two-wire analog impedance adjustment adapts to various modems and line lengths
- Full compatibility with V.34 (33.6 Kbps) and V.90 (56 Kbps) modems

#### Alarms:

- Optional alarm dial-out notification over integrated modem (remote management option)
- External alarm contact for visible or audible alarms

#### Power:

- -48 VDC @ 1A input from battery source
- Optional 115 VAC/75 W power converter
- Optional 220 VAC/50 Hz to –48 VDC converter module for international applications
- Solid-state fuseless overvoltage and overcurrent protection

## Regulatory Approvals:

- FCC Part 68: CS-03 listed telephone line interfaces
- FCC Part 15: Class A Radiated Emissions Control
- NRTL safety listed: UL 1459, CSA
- National Electrical Code 1996 safety requirements

#### Physical:

- Dimensions:
  - 1.75 in. (H) x 17 in. (W) x 17.75 in. (D)
  - 4.45 cm (H) x 43.18 cm (W) x 45.09 cm (D)
- Weight: 14.5 lb. (6.6 kg) fully loaded
- Rackmount: 19 in. (48.26 cm) or 23 in. (58.42 cm)
- Twenty-four Access Bank Is can be mounted in a standard 7 ft. (2.13 m), 23 in. (58.42 cm) equipment rack
- Optional Trimount bracket to wall mount 3 Access Banks and power converters

# **Environment:**

- Normal operating temperature: 32° to 122°F (0° to 50°C)
- Solid-state over-temperature protection
- Relative humidity (non-condensing) range: 0% to 95%

#### Accessories:

- Optional Customer Premises Equipment Battery Backup unit (120 VAC to –48 VDC power) for up to eight hours of uninterrupted power protection
- Flush wall mount, desktop or 19 in. rack mount (multi-function brackets included)
- Optional trimount bracket for wall mounting of three Access Banks and power converters

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