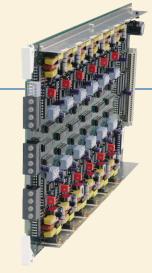
# Access Bank I and II Access Exchange

# FXO/DPT 12-Channel Card

Part Number: 740-0004



The FXO/DPT card is used by the Access Bank I, Access Bank II and Access Exchange platforms to extend support for PBX features such as call transfer, direct extension dialing, hunt groups and conferencing.

#### Provide PBX features at remote locations

The Foreign Exchange Office (FXO) and Dial Pulse Termination (DPT) 12-Channel Card sinks battery current and detects ringing voltage provided by a connected Central Office (CO) line or PBX extension. Thus, the FXO provides a method to transport dial tone signals to a remote location and extend support for PBX features such as call transfer, direct extension dialing, hunt groups and call conferencing.

When configured as a DPT interface, the card sinks and detects both forward and reverse current, replicating the conditions from the remote CO Direct Inward Dial (DID) lines. DID service allows the dialed digits to ring a telephone extension directly without requiring a dedicated telephone line. Additionally, the DPT interface is useful in terminating Dialed Number Information Service (DNIS) for 800 numbers, allowing Automatic Call Distributors (ACDs) and Voice Mail Systems to provide information to the receiver that is specific to the 800 number dialed.

# Allows calling party supervision

The FXO/DPT card supports proprietary 2-Wire Calling Party Disconnect (CPD) when used with an Access Bank®/Access Exchange™ FXS card on the far end. This feature allows calling party supervision and prevents hung lines in PBX, IVR, and key systems. The card also converts FXO loop start (with reverse battery) to E&M immediate start, providing DPT functionality with ringing detection. This feature is frequently used when interfacing with many CTI-based applications.

#### Features At-A-Glance:

- Provides switch selectable FXO loop-start or ground-start for each channel
- Supplies switch selectable DPT functionality
- Supports DID and DNIS carrier services
- Converts FXO loop-start to E&M immediate start
- Displays call progress through channel status LEDs
- Include three-mile range analog loop and full compatibility with V.34 modems
- Provides fuseless overvoltage and overcurrent safety protection
- Adapts to line conditions with patented automatic impedance balancing
- Passes caller-ID and other CLASS® services for line connections



## Technical Specifications

#### FXO Transmission Performance:

- Return loss: ERL > 28 dB, SRL > 20 dB with respect to 900  $\Omega$  +2.16 µF
- Transhybrid loss: ERL > 28 dB, SRL > 20 dB with respect to 900  $\Omega$  +2.16  $\mu$ F
- Idle noise: A/D < 15 dBrnC0, D/A, 10 dBrnC0
- Crosstalk coupling: < 80 dB at 0 dBm0
- Signal/distortion: > 45 dB with 1004 Hz, 0 dBm0 input
- Overload:  $+3.0 \text{ dBm/}900 \Omega$
- Frequency response: +0.25 dB, -1.0 dB from 300 to 3400 Hz
- Encoding: μ-Law 255 as defined in CCITT G.712
- Terminating impedance: 900  $\Omega$  + 2.16  $\mu$ F
- Transmit gain/loss: 0 to -9 dB, switch selectable per channel
- Receive gain/loss: 0 to –9 dB, switch selectable per channel
- Modem support: Full compatibility with V.34 and V.90 modems. Patented automatic analog impedance adjustment adapts to various modems and line lengths
- Transmit TLP maximum: +6 dBm
- Receive TLP maximum: +3 dBm
- Longitudinal balance: Loop-start: 200 Hz to 1000 Hz ≥ 81 dB, 1000 Hz to 4000 Hz ≥ 70dB;
- Ground-start: 200 Hz to 1000 Hz  $\geq$  73 dB, 100 Hz to 4000 Hz  $\geq$  61 dB

#### FXO Signaling Performance:

- DC loop range: 4000  $\Omega$  DC signaling
- Ringer equivalency number (REN): 0,4B (AC)
- Ringing voltage detection: Detects Class A and B ringing, follows distinctive ringing
- FXO DC resistance: 100  $\Omega$  effective with electronic hold
- Maximum DC: 150 mA
- Control technique: Solid-state, no mechanical relays
- Overvoltage: 600 Vrms without fire hazard per UL 1459, FCC Part 68 lighting protection
- Protection: Fuseless overvoltage and overcurrent protection
- Termination type: FXO loop-start or FXO ground-start, switch selectable per channel
- Signaling selection: DPT functionality enabled/disabled on all 12 channels
- Address signaling: DTMF or dial pulse
- Calling party disconnect: Detects and forwards current interruption to disconnect answering device and modems

#### Regulatory Approvals:

- FCC Part 68, CS-03 listed for connection to PSTN
- FCC Part 15, Class A Radiated Emissions Control
- NRTL safety listed: UL 1459, CSA
- National Electrical Code 1996 safety requirements

#### Physical:

- Dimensions:
  - 7.8 in. (H) x 13.6 in. (D)
  - 19.81 cm (H) x 34.54 cm (D)

#### **Environment:**

- Operational temperature: 32° to 122°F (0° to 50°C)
- Relative humidity: 0% to 95%



### Carrier Access

### **Product Ordering Information**

Inside Sales Representative:

E-mail

inside-sales@carrieraccess.com

Phone

800-365-2593

Fax

303-218-5680

5395 Pearl Parkway Boulder, Colorado 80301