

Telephone Interface Board (FXS) Mercury Intercom Solutions

Key Features

- Optional interface for Mercury Interface Units (MIUs)
- Up to 4 Telephone Interface Boards per MIU
- Provides a standard interface for up to 4 analog telephones
- Allows subscribers to navigate the Mercury system using a DTMF keypad
- Can be used to access a landline at any location on the Mercury system
- Ring-down feature enables an immediate, dedicated connection with any Mercury subscribers
- RJ11 connectors for easy cabling
- Port-specific input and output level adjustments
- Software configurable
- Customizable dial plans



The Telephone Interface Board (FXS) is an optional interface that provides four analog telephones or other telephony devices.

Description

The Telephone Interface Board (FXS) is an optional interface board that provides a standard interface for up to four analog telephones or other telephony devices, allowing Mercury subscribers to make and receive calls anywhere on the system.

Operation

The FXS can be used for point-to-point calls or conferences with other telephone handsets, Mercury intercom panels, radios, phones and other devices connected via the Mercury Telephone Expansion Board (FXO), and VoIP phones connected to the Mercury system. The FXS also provides standards-based trunks to third-party PBXs and FXO devices. Comprehensive support is provided for all major CODECs with echo suppression implemented using DSP-based adaptive filtering.



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Technical Specifications

Line Interface

Number of channels: 4 per card, Max of 4

option cards per MIU

DSP Channel usage: Programmable

Signaling Loop start

DTMF: DTMF generation for dial-out **Line Impedance:** CTR21, 600R, 900R or

Japan – software selectable **Return loss:** >18dB 300-400Hz

Protection: "on premise" level 1 protection

Ring Trip: Min 500R, typical 800R

Ringing capability: 500R for 40Vrms into

REN=3

Ring voltage: 65Vrms typical, no load Longitudinal to metallic balance: >40dB (300-600Hz): 45dB (600-3400Hz)

Common mode rejection ratio (CMRR):

>40dB 300-3400Hz **THD:** <1% at 0dBm, 1kHz

Crosstalk: <-85dB (inter-channel and

inter-card)

Nominal line TX level: -9dBm ± 1dB

Input level adjustment: Via software –9dB

to +12dB in steps of 1.5dB

Output level adjustment: Via software -34.5dB to +12dB in steps of 1.5dB. Mute

option

Freq response: 300Hz - 3200Hz ± 2dB ref to 1kHz (8kHz sampling) with all echo processing and pre-emphasis disabled

hours

Connectors

Line: RJ11 2 pin modular jack socket **Phone connector pinout:** Pin 3 – ring (A), Pin 4 – tip (B), other pins - unused

Ringing

Ring Cadence: US Ringtone

Echo Suppression

General: DSP Based adaptive filter providing acoustic & network suppression

Tail length (acoustic): 39.5ms
Tail length (network): 24ms

Echo Return Loss: 30dB typical, network

and acoustic

Enhancement (ERLE)

Environmental

Operating Temperature: 32° to 122°F (0° to 50°C)

Storage Temperature: -4° to 185°F (-20° to 85°C)

Operating Humidity: 0 to 90%, non-condensing, relative humidity

Dimensions

5.5 x 0.67 x 8.1in (WxHxD) (140 x 17 x 205mm)

Weight

6.0oz (170g)

Reliability

MTFB: 80,000 hours

Order Code

700-15-04