



Main Characteristics

- 12 or 24 high-impedance analog channels
- DSPs for processing of audio
- Web interface for control, visualization and download of logs
- Classification of call answering (Call Analyzer)

Typical Applications

- High impedance recording
- Telephone call monitoring

Models

- EBS-FXO HI 120, with 12 analog recording interfaces
- EBS-FXO HI 240, with 24 analog recording interfaces

Overview

The main function of the EBS-FXO HI is the passive recording (high impedance) of PBX extensions or analog telephone lines. EBS-FXO HI modules are connected in parallel with the channel, recording in a manner that is imperceptible to the user and without degrading call audio. It reports to the host the ring signal, inversion of polarity, audio events, and answering and hang up of the call, without the need for integration with the PBX to begin and end the recording.

Exclusive Resources of the EBS-FXO HI:

- Network channels: 12 or 24 high-impedance analog channels
- A VoIP channel for monitoring in real time
- Network protocols: FXO
- PBX Protocols: Flash recognition
- Line presence detection
- Reports the answering and hang up of calls monitoring line tension
- Records in high-impedance without occupying a line (extension)
- Reports ring and inversion of polarity
- Reports failure of physical call on the line

Physical characteristics:

- Connectors: 50-via Centronics
- Weight: 2.62 Kg

Resources available on the entire EBS family of products

Voice processing

High capacity resources:

- All voice resources available simultaneously on all channels
- DSPs for processing of audio and signaling

Detection and generation of tones (DSP)

- MFC exchange (R2 signaling)
- Detection and generation of DTMF digits, fax tones, 425Hz (dial tone) and TDD messages (*Telecommunications Device for the Deaf*)
- Detection of intercept tones (voice mail, collect calls, etc.)
- Generation of programmable tones (beep)
- Detection of silence and presence of audio before and after answering
- Detection of fax signal and voice mail with standard signaling: 600Hz/450ms – 1000Hz/450ms or 300Hz/250ms
- Detection of programmable frequencies (for example: portability tone, non-standard voice mail, etc)

Audio enhancement features

- DTMF suppression
- Manual and automatic volume control (AGC)
- *Carrier grade* echo canceling in hardware
 - Up to 64ms (512 TAPS) simultaneously on all channels, independent of other resources
 - Convergence and automatic delay adjustment during the entire call
 - Compatible with ITU-T G.165 and G.168 norms (2000 and 2002)

Call signaling and handing

- Detection of collect calls through recognition of tones, signaling or double answering
- Call progress for generation of call control events in FX0 interfaces and PBX protocols
- Classification of call answering (*Call Analyzer*)

Features programmable via API K3L

Recording and reproduction of voice messages

- Full-duplex mono or stereo recording
- Codecs available for recording and reproduction: G.711 (A-law and μ -law), GSM and ADPCM, PCM8, PCM16 and AMR.
- Reproduction of messages (play) in the PCM8, PCM11, PCM16, A-law and μ -law, GSM and DVI4 (ADPCM) formats

VoIP channel features

- Codecs available for VoIP: G.711 (A-law and μ -law), ADPCM, GSM, iLBC

High availability

- 2 Ethernet ports for server connection (network redundancy)
- Server redundancy (supports virtual IP)

OAMPT

- Automated installer for updating and implementing new systems
- Web system for configuration, monitoring and diagnostics
- Native integration with SNMP
- Signaling analyzer
- Remote monitoring in real time (via web)
- Web interface for control, visualization and download of logs

Physical Characteristics

- Standard 1U Module and 1/2 19" rack
- Measurements in mm: 44.5 (height) x 220.5 (width) x 280 (length)
- Power source: Full Range (100~240Vac - 50/60 Hz)

Guarantees and Certifications

- Factory warranty 3 years
- The entire EBS line is Anatel certified
- ISO 9001:2008 Industry certified

PATCH PANEL

EXCLUSIVE ACCESSORY FOR EBS-FXS AND EBS-FXO HI

Khomp patch panels were developed to work in conjunction with EBS-FXS 240 and EBS-FXO HI products in the conversion of Centronics-type inputs to RJ11 outputs. This way, with one patch panel it is possible to convert 1 Centronics input into 24 RJ11 ports on the 24-port model, or 2 Centronics connectors to 48 RJ11 ports, on the 48 port model.

Additional product images



Rear view



Example of 7 EBS modules arranged in a standard 19" rack

Application Model

