

Quadro[®]FXS 26



Quadro FXS 26: Analog Telephone to Session Internet Protocol(SIP) Gateway

Analog telephones are present in most corporate telephone networks, but this should not discourage companies from moving to an IP solution. The Quadro FXS 26 gateway allows up to 26 analog phones to communicate with a new VoIP network. The transition will have a minimal impact on the analog phone users and also allows them to get more out of the phone on their desk. By installing an IP PBX as the new core telephone system, users will benefit from new features only available on the upgraded system. An Epygi FXS gateway grants analog phone users access to some of these features while the company's existing telephone network matures to an IP-enabled network in the future.

IP PBX integration

The Quadro FXS 26 gateway can be connected to any open standards SIP PBX to support analog phones. The installation of an Epygi VoIP solution yields additional benefits and simplifications for the telephone network. This solution will plug and play with the QuadroM and QX1000 IP PBXs on the same LAN and can be managed directly from the administrator interface on the Epygi IP PBX. FXS ports are mapped to available lines on the Epygi PBX, so they are part of the PBX dialing plan, just like any extension on the system.

What are Your VoIP BENEFITS?

- Easy PnP Installation
- Retain Analog Investment
- Reliable Epygi VoIP Technology
- Single Interface Management

Telephony

PBX Features
 Call waiting
 Call statistics
 Dial plans (call routing),
 Time of day routing
 External Voice Mail

PBX Features (supported with QuadroM IP PBX)
 Call blocking, Forwarding, Hold, Transfer
 Call relay, Call waiting, Caller ID Detection, Hiding Caller ID
 Call park, Pickup
 Many extension ringing
 Call hunting
 Voice mail
 SMS notification for Voice Mail
 Voice Mail profile
 Speed dialing
 Hold music
 Do Not Disturb
 Unified messaging
 3-way conferencing
 T.38 fax, fax relay and clear channel fax
 Unified Fax Messaging
 Busy auto-redial
 Directory assistance
 Dial plans (call routing)
 Time of day routing
 Call Queue
 Call statistics

Voice Features
Voice Coding:
 G.711, G.726 (16, 24, 32, 40 Kbps),
 G.729A, iLBC (13.33 kbit/s, 15.2 kbit/s);
 VAD, CNG, G.168 echo cancellation
VoIP Encryption:
 SRTP
VoIP Signaling
 SIP, SIP/TLS
 DTMF
 In band & out of band signaling support.

VoIP Data and Signaling Protocols
 ITU-T G711, G.726, G729 Annex A;
 IETF RFC 3951- iLBC; ITU-T Q.23, Q.24;
 Bellcore GR.506, GR.181; ITU-T G.168-
 2000, 2002; ETS 300659 1,2,3;
 SIP, SIPS/TLS (RFCs: 2246, 3261, 3263,
 3265, 3311, 3323, 3324, 3325, 3428, 3515,
 3578, 3581, 3725, 3842, 3856, 3863, 3891,
 3892, 4028, 4235)

SDP (RFC: 2327, 4568)
 RTP/SRTP (RFCs: 1889, 1890, 2833,
 3389, 3550, 3551, 3555, 3711, 4733,
 3952),
 Fax over IP (ITU-T: T4, T30, T38, V17,
 V21, V27 ter, V29)

POTS Signaling
 Loop start
 FSK and DTMF Caller ID support

Connectivity

Physical Interfaces
Premise connections:
 2 FXS short-loop FXS ports (RJ-11)
 24 FXS short-loop FXS ports (RJ-21)
 1 LAN Ethernet 10/100 BASE-T port (RJ-45)

Uplink connections:
 1 WAN Ethernet 10/100 BASE-T (RJ45)

Phones
Analog phones:
 26 Analog phones (or other analog devices) to connect via FXS ports

Virtual Extensions:
 Up to 200 Virtual Extensions can be registered*

*The total number of extensions used for Analog phones and virtual extensions can not exceed 200 extensions.

System Capacity
 Up to 26 simultaneous VoIP calls with external parties
 Unlimited station to station calling for analog phones

System

Management
 Auto-configuration with QuadroM and QX1000 IP PBXs
 Plug and play with QuadroM and QX1000 IP PBXs
 Multilingual WEB interface accessible from LAN and WAN (HTTP/HTTPS)
 Password control
 Remote diagnostics and software upgrade
 Download/restore configuration
 Legible and editable configuration files
 FXS Lines Gain Control
 SNMP Monitoring and Configuration

Reset button with factory reset option
 Custom Language Pack

Billing
 Radius Client (RFCs: 2865, 2866)

Diagnostics/Testing
 LEDs: Busy, Info, Fault, LAN, WAN,
 Loop settings
 Remote testing

Internet

STUN/NAT traversal (RFC 3489)
 IPSec VPN with DES, 3DES and AES encryption in tunnel mode (RFCs: 2402, 2406, 2409).
 Manual and automatic IKE key support
 PPTP VPN, L2TP VPN
 Firewall security via:
 Intrusion Detection System
 NAT (Network Address Translation)
 Policy and service-based filtering
 Stateful inspection firewall
 DHCP server on the LAN side
 DHCP client on the WAN side
 DNS server with forwarding functionality
 SNTP (Simple Network Time Protocol) server/client for computer clock synchronization
 PPPoE connection to the ISP with PAP/(MS)CHAP authentication
 IP DIFFSERV for QoS
 Virtual LAN (VLAN/IEEE 802.1Q)
 DNS (DYNDNS) support with third party NAT/Router with port forwarding and port translation.

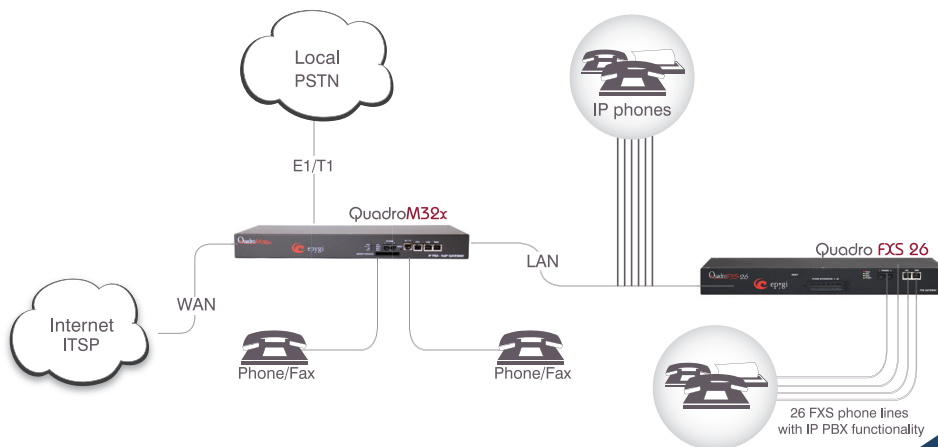
Environmental

Physical Dimensions
 Rack-mountable devices:
 Measurements: 19" x 7.56" x 1.77"
 (48.0 x 19.2 x 4.5 cm)
 Weight: 2.47 lbs. (1090 g)

Conditions
 41°F - 104°F (5°C - 40°C) operating temperature
 41°F - 140°F (5°C - 60°C) storage temperature
 5% - 90% non-condensing humidity

Power Supply
 Input 100 - 240 VAC; 50/60 Hz; 0.5 A

Regulatory Compliance
 Telecom: TBR12/TBR13; AS/ACIF



Epugi Technologies, Ltd.
 6900 Dallas Parkway, Suite 850
 Plano, Texas 75024
 Tel/Fax: (+1)972.692.1166
 Web: www.epugi.com
 E-mail: sales@epugi.com