

Quadro[®]FXS 16



Quadro FXS 16: The Voice over IP FXS Gateway

The Quadro FXS 16 port gateway is a modular approach to adding additional FXS lines (analog phones) to a corporate phone network that uses Epygi's IP PBXs. Multiple Quadro FXS 16 Gateways can be added to an Epygi IP PBX for additional analog phone support. Each device allows the use of 16 additional analog phones by converting the IP extensions of the IP PBX into analog ports without the complexity of using other FXS gateways resulting in a multi-vendor solution. An Epygi solution from end-to-end increases the overall reliability of a hybrid VoIP deployment and facilitates Plug-and-Play functionality.

Integration with IP PBX

This solution simply connects to the existing Ethernet network and communicates directly with the LAN interface of an Epygi IP PBX. Therefore, minimal configuration is needed to continue to support the current analog phones installed. The Epygi IP PBX will automatically use the new FXS ports and display the new extensions in Epygi IP PBX management GUI. The new analog lines can then be managed from the IP PBX interface without a need to now support multiple Quadro devices.

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
- Redirection to External Voice Mail

PBX Features (supported with Epygi IP PBXs)

- 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:

- 16 FXS short-loop FXS ports (RJ-11)
- 1 LAN 10/100 Ethernet port (RJ45)

Uplink connections:

- 1 WAN Ethernet 10BASE-T port (RJ45)

Phones

Analog phones:

- 16 Analog phones (or other analog devices) to connect via FXS ports

Virtual Extensions:

- Up to 100 Virtual Extensions can be registered*

*The total number of extensions used for Analog phones and virtual extensions can not exceed 100 extensions.

System Capacity

- Up to 16 simultaneous VoIP calls with external parties
- Unlimited station to station calling for analog phones

System

Management

- Auto-configuration with Epygi IP PBXs
- Plug and play with Epygi 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
- IP Call Quality Rating
- Remote testing and VoIP diagnostics
- Power-up diagnostics

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

Measurements: 19" x 7.56" x 1.77"
(48.0 x 19.2 x 4.5 cm)

Weight: 9.2 lbs. (4.18 kg)

Conditions

41°F - 104°F (5°C - 35°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

Output 12.0 VDC; 3.5 A

Regulatory Compliance

Safety: UL 60950; CSA 22;

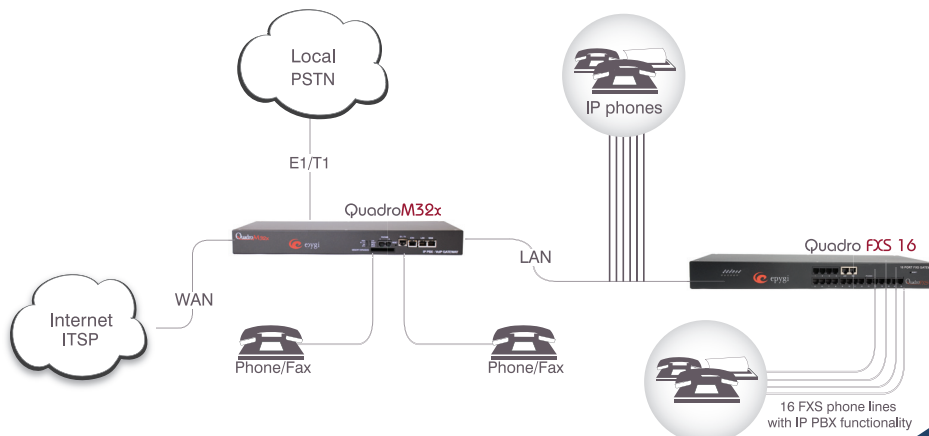
EMC: FCC Part 15 Class A;

EN55022 Class A, EN55024;

Telecom: CTR21/TBR21

Certification:

For Canada, European Community, USA



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