

# Quadro<sup>®</sup>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.

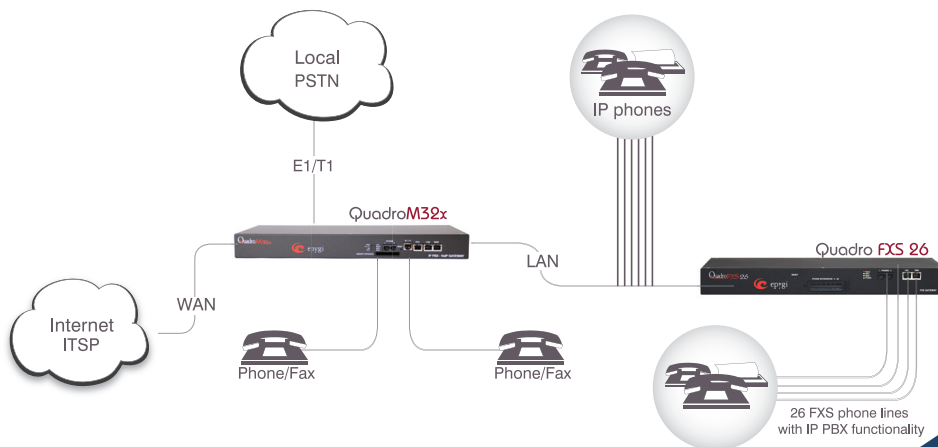
## Environmental

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



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