



QXFXO4

The QXFXO4 Gateway is designed to add four additional outside PSTN Lines to a corporate phone network when paired with an Epygi QX IP PBX. Integrating this product with any QX IP PBX allows the Gateway to then be managed through the IP PBX's GUI. The system includes a firewall and can be used to IP-enable a legacy analog PBX by connecting the FXO ports to FXS extensions.



FXO PSTN ports	4
Ethernet LAN ports	1
Ethernet WAN ports	1
VPN capability	
Firewall	
Stand-alone or paired with a QX IP PBX	

FEATURES

Telephony

PBX Features

Multi-level Auto Attendant with Interactive Voice Response (IVR) and VoiceXMLv2 support
Call blocking, unconditional Call Forwarding
Call Detail Records
G3 fax support: T.38 and clear channel fax
Dial plans (call routing), time of day routing

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

VoIP Data and Signaling Protocols

ITU-T G.711, G.726, G.729 Annex A, G.168-2000, 2002, Q.23, Q.24; IETF RFC 3951- iLBC; Telcordia (Bellcore) GR.506, GR.181; ETS_300_659_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:

1 LAN Ethernet 10/100 BASE-T port (RJ-45)

Uplink connections:

4 FXO ports to the central office (RJ11)
1 WAN Ethernet 100 BASE T (RJ45)

System Capacity

4 simultaneous IP-PSTN calls

Network

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

System

Management

Operation modes: Master/Slave
Easy interconnection with QX IP PBXs
Web interface accessible from LAN and WAN (HTTP/HTTPS), the WAN management access can be switched off
Password control
User rights management
Remote diagnostics and software upgrade
Download/restore configuration
Reset button with factory reset option
Custom Language Pack
System event notification via SMS/email
Emergency recovery

Diagnostics/Testing

System Status LED
Remote testing
FXO and network diagnostics
Security diagnostics
System logs, SIP IDS logs
Call capture

Billing and Statistics

Radius Client (RFCs: 2865, 2866), CDRs

Environmental

Physical Dimensions

Rack-mountable devices:

Measurements:

8.0" x 4.0" x 1.6" (20.5 x 10.5 x 4.0 cm)

Weight:

1.28 lbs. (580 g)

Conditions

Operating temperature:

41°F - 104°F (5°C - 40°C)

Storage temperature:

41°F - 140°F (5°C - 60°C)

Non-condensing humidity:

5% - 90%

Power Supply

Input: 85-264VAC, 47-63Hz, AC
0.4A/115VAC, 0.2A/230VAC;
Auxiliary output power: 12.0VDC, 0.6A (max)