



QX200

With the ability to support 64 concurrent calls, the QX200 IP PBX is designed for offices with up to 200 employees. The system has four FXO ports in order to connect to the PSTN and two FXS ports for analog phones and fax machines. SIP trunking allows for the QX200 to connect directly to an ITSP with no additional equipment. The QX200 includes a firewall and SIP Intrusion Detection for optimal security. Additional E1, T1, FXO, ISDN BRI and FXS ports can easily be provided using the Epygi QX Gateways. When rack-mounted and paired with an Epygi QX Gateway, power redundancy provides added protection.



Analog phones	2
IP phones	24
Additional IP phones with keys	176
Total phones	202
Concurrent calls	64
FXO PSTN ports	4
Ethernet LAN port	1
Ethernet WAN port	1
Audio In port	1
Audio Out port	1
SD slot	1



GATEWAYS	Recommended Number (max)
QXFXO4	16
QXISDN4	8
QXE1T1	2 (E1 mode), 3 (T1 mode)
QXFXS24	8

FEATURES

Telephony

PBX Features

- Auto Attendant with standard and customizable scenarios
- Call blocking, forwarding, hold, transfer, Call Relay and call waiting
- Caller ID detection and hiding caller ID
- Voicemail system
- Voicemail notification via SMS/email
- Caller ID-based voicemail profile
- Call park, call pickup, paging, intercom
- Distinctive ringing
- Speed dial
- Many Extension Ringing
- Receptionist
- Call hunting
- Call back from Auto Attendant
- Hold music
- Call history
- Do Not Disturb
- Global speed dial
- Find Me / Follow Me
- Unified Messaging
- Three-way conferencing
- Hotline Service
- G3 fax support: T.38 and clear channel fax
- Universal Extension Recordings
- Busy auto redial
- Directory assistance
- Dial plans (call routing), time of day routing
- Scheduling, Day/Night Switching
- Alarm
- Dial & Announce (D&A)
- Class of Service
- Calling Cost Control*
- Call queue
- Redundancy*
- Automatic Call Distribution (ACD)*
- Epygi ACD Console (EAC)*
- Call Recording (20 ports)*
- Barge-In*
- Conference Server*
 - Audio (32 ports) / Video (16 ports)
- iQall Mobile Toggling*

PC-Based Applications

- Desktop Communication Console (DCC)*
- QX-Quadro Configuration Console (QCC)
- Epygi Media Streamer (EMS)
- Epygi Hotel Console (EHC)*
- Auto Dialer*

Voice and Video Features

Voice Coding:

- G.711, G.726 (16, 24, 32, 40 Kbps), G.729A, iLBC (13,33 kbit/s, 15,2 kbit/s), VAD, CNP, G.168 echo cancellation, G.722 and G.722.1 pass-through
- point-to-point HD call

Video Coding:

- H.263, H.263+ and H.264 pass-through
- point-to-point video call

VoIP Encryption:

- S RTP

VoIP Signaling:

- SIP v2, SIP/TLS

DTMF:

- In band & out of band signaling support

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;
- SDP (RFC: 2327, 4568)
- SIP, SIP/TLS (RFCs: 2246, 3261, 3263, 3265, 3311, 3323, 3428, 3515, 3578, 3581, 3842, 3856, 3863, 3891, 3892,

- 4028, 4235)

- RTP/SRTP (RFCs: 1889, 1890, 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

- FSK message waiting indicator support

Connectivity

Physical interfaces

Premise connections:

- 2 FXS short-loop FXS ports (RJ-11)

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

Uplink connections:

- 4 FXO ports to the central office (RJ11)

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

Audio port connections:

- Line-in/line-out (line-in signal level - 0.5V

- RMS, Line-out R_{load} - 600Ohm to

- 10K Ohm)

Phones

IP phones:

- 24 IP phones by default

- 176 additional IP phones may be added

- with feature keys

- All IP phones can be connected both from

- LAN or WAN side or as remote extensions

- Auto provisioning support for all IP phones

- from selected manufacturers

- PnP configuration support for the most of

- IP phones from selected manufacturers

- Auto configuration using OpenVPN service

- for some of selected IP phones

Analog phones:

- 2 analog phones (or other analog devices)

- to connect via FXS ports

Auto Attendants and virtual extensions

Auto Attendants:

- Up to 400 Auto Attendants can be added

Virtual extensions:

- Up to 400 virtual extensions can be

- added**

System Capacity

- Up to 64 simultaneous VoIP calls with

- external parties

- Unlimited station-to-station calling for

- IP phones

- Four analog PSTN calls with external

- parties

Memory Storage

- SD card

Network

- STUN/Network Address Translation

- (NAT) traversal (RFC 3489)

- IPSec VPN with 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)

- Mail client to send voice and fax messages

- as email attachments (.wav and .tif/.pdf

- respectively) and system notifications

- DNS (DYNDNS) support with third party

- NAT/router with port forwarding and port

- translation

System

Management

- Multilingual web interface accessible from

- LAN and WAN (HTTP/HTTPS)

- Password control

- User rights management

- Remote diagnostics and software upgrade

- VoIP Carrier Wizard

- Download/restore configuration

- Legible and editable configuration files

- Auto configuration of IP phones via TFTP

- and HTTP

- SNMP monitoring and configuration

- Third Party Call Control (3PCC) XML RPC*

- Reset button with factory reset option

- Extension status watching (with DCC)

- 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), Call

- Detail Records (CDR)

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%

Powering Options

- Input: 85-264VAC, 47-63Hz, AC

- Auxiliary output power: 12.0VDC,

- 0.6A (max)

Power Consumption

- 2.8W (idle), 6.7W (max)

- * Requires a software license key

- ** The total number of extensions used for IP phones, analog phones, Auto Attendants and virtual extensions can not exceed 400.