QXISDN4
QXISDN4+

The QXISDN4 Gateway includes four ISDN BRI ports to connect to an ISDN PBX. It can also connect to the ISDN lines from a central office or direct to an ISDN phone. It is designed to add inbound lines and balance outbound call volumes. It's a stand-alone SIP Gateway device that includes a VPN router, firewall, VPN capability and an Auto Attendant for two-stage dialing. Integrating this product with any QX IP PBX allows the Gateway to then be managed through the IP PBX's GUI.

The QXISDN4+ activation license key is available to purchase for the QXISDN4. Once the QXISDN4+ activation license key has been installed and activated, the Gateway will function as an IP PBX and cannot be changed back. The QXISDN4+ can support 16 IP phones by default and all the applicable QX50 features that can be purchased and activated. The QXISDN4+ doesn't support Audio In, Audio Out and a SD card.

ISDN BRI ports	4
Ethernet LAN ports	1
Ethernet WAN ports	1
VPN router	
Firewall	
HTTP server	

FEATURES

Telephony

PBX Features
  Multi-level Auto Attendant with Interactive
    Voice Response (IVR) and VoiceXML
    v2 support
  Call blocking, unconditional call forwarding
  Call history
  G3 fax support: T.38 and clear channel fax
  Dial plans (call routing), time of day routing
  Caller ID detection

Additional PBX Features*
  Voicemail system, voicemail notification
    via SMS/email, caller ID-based voicemail
    profile
  Call park, call pickup, paging, intercom
  Distinctive ringing, Do Not Disturb
  Many extension ringing, call hunting
  Speed dial, global speed dial
  Receptionist
  Automated call back from Auto Attendant
  Hold music
  Find Me Follow Me
  Unified Messaging
  Three-way conferencing
  Hotline Service
  Universal Extension Recordings
  Busy auto redial
  Directory assistance
  Class of Service
  Call queue
  Redundancy**
  Automatic Call Distribution (ACD)**
  Call Recording** (12 ports)
  Barge-In*
  Audio (16 ports) / Video (8 ports)
  Conference Server**
  Mobile Toggling**

Licensable PC-Based Applications*
  Desktop Communication Console (DCC)**
  Auto Dialer**

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 v2, SIP/TLS
  DTMF:
  In band & out of band signaling support

Additional Voice Features*
  Voice Coding:
  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 Data and Signaling Protocols
  ITU-T G.711, G.726, G.729 Annex A;
  IETF RFC 3951- iLBC;
  SIP, SIP/TLS (RFCs: 2246, 3261, 3263,
    3265, 3311, 3323, 3428, 3515, 3578,
    3581, 3842, 3856, 3863, 3891, 3892,
    4028, 4235)
  SDP (RFC: 2327, 4568)
  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)

ISDN BRI Signaling
  ITU-T: Q.921, Q.931 (DSS1), Q.951;
  ETSI ETS300 102 (NET5); NTT INS1500
    for Japan

ISDN Features
  Supported modes: NT/TE BRI expansion
    for QX IP PBXs

Connectivity

Physical Interfaces
  Premise connections:
  1 Ethernet 10/100BASE TX port to connect
    a PC for configuration purposes (RJ45)

  Uplink connections:
  1 Ethernet 10/100BASE TX (RJ45)

  ISDN Connection
    4 ISDN BRI ports to the central office
    or local PBX (RJ45), NT and TE modes
    supported

Phones*
  IP phones:
  16 SIP phones by default
  32 additional SIP phones may be added
    with feature keys
  All SIP phones can be connected both from
    LAN or WAN side
  Plug-and-Play (PnP) with select IP Phone
    manufacturers

Auto Attendants and virtual extensions
  Auto Attendants:
  Up to 200 standard and custom Auto
    Attendants can be registered

  Virtual extensions:
  Up to 200 virtual extensions can be
    registered***

System Capacity
  8 simultaneous IP PSTN calls

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

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)
  DNS support with third party
  NAT with port forwarding and translation
  Mail client to send voice and fax messages
    as email attachments (.wav and .tif/.pdf
    respectively) and system notifications*

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

Additional Management features*
  Third Party Call Control (3PCC) XML RPC**
  Extension status watching (with DCC)
  Auto configuration of IP phones via
    TFTP and HTTP

Diagnostics/Testing
  System Status LED
  Remote testing
  ISDN 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. (580g)

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
  Auxiliary output power: 12.0VDC,
    0.6A (max)

Power Consumption
  2.25W (idle), 4.6 (max)

  *   Available with QXISDN4+ key
  ** Requires a software license key
  *** The total number of extensions used for IP
      phones, analog phones, Auto Attendants
      and virtual extensions can't exceed 200.

Tel: (+1) 972.692.1166
Web: www.epygi.com
E-mail: sales@epygi.com