



- 2, 4 or 8 BRI S/T Ports
- Up to 16 simultaneous VoIP channels
- Available in MultiPath or Gateway configurations
- Auto-Provisionable
- Survivable
- Unified Communications Proxy (UCP)
- Supported by Remote Management Tools*
- Perfect for small and medium-sized enterprises with ISDN lines

Tenor

The Tenor VoIP MultiPath Switch Offers a Robust VoIP Switching Solution For Enterprises

Quintum's Tenor switching/gateway solutions are deployed worldwide to provide highly reliable, easy-to-implement VoIP connectivity in a full range of enterprise and service provider environments. These highly adaptable solutions work with traditional PBXs, IP PBXs and IP phones, IVR and ACD systems, RADIUS servers, and other critical components of end-to-end H.323- and SIP-based communications environments. They are perfect for deploying VoIP in small enterprises, or remote offices of larger enterprises.

Tenor

BX Series

Tenor S (Survivable MultiPath Switch) Offers a Survivable Branch Office VoIP Access Solution for IP PBXs and IP Centrex

Quintum's TenorS line is a complete SIP-based VoIP solution for the branch office or for service provider customer premise equipment, providing full survivability in the event that access to the central and/or hosted IP PBX is lost. Because it delivers a complete solution in a single device - and because it offers such easy, scalable implementation and management - the Tenor S line significantly reduces the total lifecycle cost of VoIP deployment, while optimizing service reliability. Tenor S also offers PSTN connectivity for local access back up and E911 service.



The Quintum® Tenor® BX MultiPath Switch offers enterprises using ISDN Basic Rate Interface (BRI) lines an easy, cost effective way to capitalize on the power of Voice over IP (VoIP). The Tenor integrates VoIP gateway functionality with its unique intelligent call routing, MultiPath architecture, and QoS support all in one solution.

Enterprises can benefit from a variety of valuable applications such as PBX extension, remote office connectivity, long distance consolidation and call centers. BX Series products can support either 2, 4 or 8 BRI lines.

Both versions of Tenor include the features that made Quintum the VoIP market value leader

- **MultiPath architecture** for easy integration with existing voice and data infrastructure, meaning little or no re-programming of the PBX, or upgrades are required and no need for special dialing plans.
- **Transparent MultiPath Call Routing** to intelligently route calls between the PBX, the PSTN, and the IP network to achieve the best combination of cost and quality. The Tenor can also route calls over IP to reduce costs, and then transparently "hop off" to the PSTN, to reach off-net locations.
- **Auto Provisioning** interface allows the Tenor solution to be deployed worldwide, and configured automatically by acquiring the configuration information from a central server, upon installation. The same auto-provisioning capability allows the Tenor to be configured from a VoIP application, thus supporting a single user interface between the VoIP application and the Tenor configuration.
- **Unified Communications Proxy (UCP)** provides 'Any to Any' connectivity: SIP - SIP, TDM - TDM and SIP - TDM, for easy integration with any network.
- **Universal Dial Plan** that provides a programmable dial plan so Tenor can be integrated into any network environment.
- **PacketSaver™ Technology** multiplexing to reduce bandwidth consumption by up to 57% by combining voice packets from multiple calls into a single packet.
- **NATAccess™** to allow Tenor to operate behind NAT firewalls to translate internal IP addresses into public addresses when a VoIP call is established with an outside party.
- **Remote Management** for anywhere, anytime remote management even behind NAT firewalls with Quintum's Remote Management Session Server.

* Available for an additional cost

Tenor BX VoIP MultiPath Switch

CALL MANAGEMENT FEATURES

- Automatic call type detection: Voice/Modem/Fax
- Trunk group support
- Public and private dial plan support
- User programmable dial plan support
- Forced IP routing and IP port mapping
- PSTN pass-through support for calls to Toll-free, local, and special service numbers (emergency service, etc.)
- Automatic appending and stripping of digits to dialed numbers
- Call Detail Records
- Least cost routing with external Quintum VoIP Call Routing Server*
- Caller ID Name and Number

TECHNICAL SPECIFICATIONS

Telephony Specifications

- Voice algorithms: G.723.1a, G.729ab, G.711
- Auto codec negotiation
- Fax Support: Group III at 2.4, 4.8, 7.2, 9.6, 14.4 Kbps, using industry standard T.38; Super G3 compatible up to 33.6 Kbps
- Modem support with G.711
- Choice of 2, 4 or 8 BRI S/T ports
- MultiPath VoIP Switch or VoIP Gateway configurations
- Ports individually programmable to NT or TE configuration
- Standard RJ-45 connectors
- Coding: A law or μ -law
- Enhanced (Carrier Grade) echo cancellation: ITU Rec. G.168, up to 128 mSecs tail size
- Signaling protocols: Net 3 ETSI EuroISDN (TBR3), AS/ACIF S031 (Australia), New Zealand Net3 (TNZ), QSIG
- VoIP to circuit, and circuit to circuit (Tandem/TDM) switching

IP Network Specifications

- LAN interface: 1 Fast Ethernet port (10/100Base-T)
- Standard RJ-45 Interface (IEEE 802.3) for 10Base-T or 100Base-T connections
- QoS Support: IP TOS, DiffServ Code Point

VoIP Network Specifications

- H.323 v.3 Gateway and Integrated Gatekeeper+
- Support for multiple SIP User Agents (RFC3261 compliant endpoint)
- DTMF Signaling via RFC 2833 or SIP Info
- SIP Supplementary Services
- Message Waiting Indicator
- SIP Refer Method support
- IVR/RADIUS server support for AAA with integrated multi-lingual IVR+
- Adaptive Voice Activity Detection (VAD) with comfort noise generation (CNG)
- Adaptive jitter buffer
- Packet Loss Concealment
- NATAccess™ - NAT/Firewall
- Security: IP filtering
- Up to 16 simultaneous VoIP calls
- Support for DNS-SRV

Configuration / Management

- Auto-Provisionable
- Quintum Tenor Configuration Manager (GUI) for configuration of remote individual Tenors
- Quintum Tenor Monitor (GUI) for alarm monitoring, call monitoring and CDR monitoring
- Remote access with external Remote Management Session Server
- SNMPv2 Agent
- Command Line Interface (CLI)

GENERAL SPECIFICATIONS

Dimensions: 1U High Chassis

- W 17 3/8" x H 1 3/4" x D 10 3/4"
- W 44.5cm. x H 4.5cm. x D 27.6cm.
- Maximum weight: 8.25 lbs. (3.75kg.)
- AC Power: 100-240 Volts AC, 50/60 Hz, 35 watts
- Operating temperature: 40° - 104° F (5° - 40° c.)
- Operating humidity: 20% - 80% non-condensing
- Telco: TBR3, AS/ACIF S031
- EMC: EN55022, EN55024, EN61000-3-2, EN61000-3-3
- Safety: UL60950, EN60950, AS/NZS60950

Model	BRI Ports	BRI B Channels	VoIP Channels
BX204	2	4	4
BX408	4	8	8
BX816	8	16	16



* Quintum product purchased separately
+ Original Quintum Tenor Only

