

Transparent Deployment.

Optimum Survivability.

Smart Flexibility.

Discover the Perfect Fit.



# The Perfect Fit. The ultimate in survivability.

Discover the innovative solutions for Enterprise and Service Provider VolP Deployments.

The challenges of VoIP deployment affect everyone. From enterprises to service providers, and especially at the edge where their respective networks meet. Enterprises need an access solution that delivers great call quality, fits seamlessly into the existing data and voice environment, and ensures rock-solid service reliability. Service providers need a solution that will fit seamlessly into their customers' diverse environments, provide non-stop service and meet their requirements for remote manageability and ease of installation.

Quintum has a solution that's a perfect fit for both — Tenor VoIP MultiPath Switches and Gateways. Our VoIP access solutions support all types of analog and digital communications environments and install with ease. They deliver unmatched survivability — even when the IP network fails. And they provide the intuitive device and call management tools that technical staffs for both enterprise and service providers need to ensure ongoing VoIP success.

So whether you're an enterprise network manager planning to implement VoIP across your remote office or a service provider delivering SIP-based access to your VoIP network, Quintum has the innovative solutions that best address your technical and business requirements.

## We offer two options for switching and gateway solutions — Tenor and the Survivable Tenor (with advanced survivability technology).

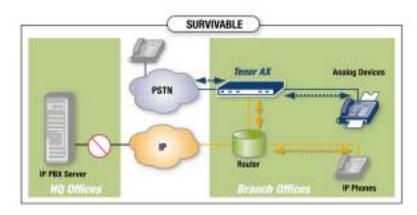
### **Tenor**®

The Tenor has a long history of offering a very versatile VoIP MultiPath switching and gateway solution with H.323 and SIP-based support of traditional PBX trunking, legacy equipment VoIP integration and VoIP-PSTN connectivity. The Tenor is used around the world in a wide variety of applications including: Inter-office trunking, IP-PBX legacy integration, Service Provider VoIP trunking, Call Centers, Calling Card services, VoIP Termination, and Call Shops.



The new Tenor S provides a complete SIP access solution for SIP-based enterprise networks offering legacy equipment integration, VoIP-PSTN connectivity, and survivability for SIP-based networks. This product has been specifically designed to offer a superior enterprise solution for IP-PBX branch offices, Hosted IP-PBX services CPE and IP Centrex CPE. The Survivable Tenor S is the only device (outside of the user VoIP endpoints) needed in the branch office to support all legacy equipment, PSTN connectivity and survivability of all IP endpoints.





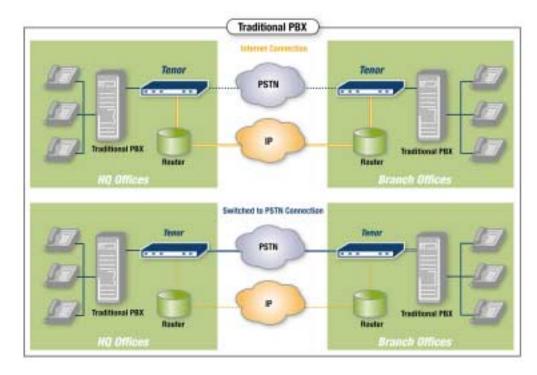
The local SIP Proxy embedded in the Tenor S provides survivability of the voice network. Connectivity for intra-office calls, inter-office calls, local calls, and 911 are maintained even in the event of an IP failure.

The Survivable Tenor S delivers maximum survivability, including PSTN back-up of all circuit-based telephony equipment. The Tenor S also features built-in SIP proxy technology so remote offices can continue to operate even if their connection to a central SIP session controller is lost. That means IP phones can keep working regardless of what happens on the network. Combined with their unique PSTN failover capabilities, this feature makes Tenor S switches the most survivable solution on the market.



#### The performance you want. The installation simplicity you need.

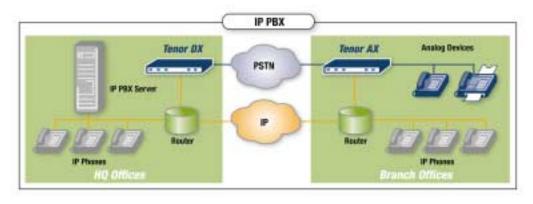
Quintum's switches snap right into place in any environment. They interoperate with, and are fully transparent to all types of traditional and IP-based PBXs. They utilize existing voice and data infrastructure, and they support any type of dial plan. The switches also support analog fax machines, conventional paging systems, and other types of existing infrastructure. Their unique features enable businesses to make the move to VoIP without costly overhauls or equipment re-configurations.



MultiPath architecture allows the Tenor to be transparently "dropped in" between the PBX and the PSTN, so it is both easy to deploy and can intelligently route calls over the network that will assure the best combination of voice quality and cost-effectiveness.

#### **Guaranteed QoS.**

In today's world, businesses can't afford to lose their voice service for even a brief moment of time. That's why Quintum Tenor switches provide automatic failover to the PSTN the moment the IP network either fails or drops below a pre-set quality threshold. Critical business activity and customer satisfaction will never be jeopardized by IP network issues again.



Tenor can interface with new IP-PBXs to provide intelligent connectivity for legacy voice equipment and connectivity to the PSTN. In fact, the Tenor can be deployed to connect a traditional PBX in a branch office to the IP-PBX, then at a later date when the traditional PBX is removed and IP-phones are deployed, the Tenor remains as the survivable branch office gateway.

#### Intelligent call routing. Smart flexibility.

Featuring complete, intelligent call management functions, Quintum solutions support both integrated circuit switching and VolP calls in a single device — and allow calls to be switched between either circuit or VolP ports. This unmatched flexibility allows for a full range of call functions — including network "hop-on" and "hop-off," analog connection to 911 emergency services, and transparent access to third-party resources such as outsourced contact centers and IVR/voice self-service systems.

#### **Efficient bandwidth utilization.**

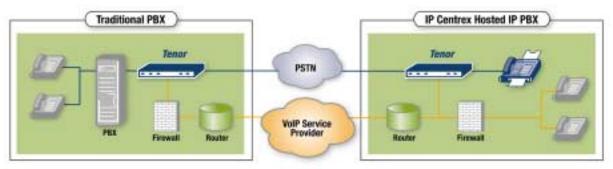
Quintum's PacketSaver™ Technology "multiplexes" VoIP packets heading along the same network route — delivering efficiency improvements of up to 57% over typical compression techniques. This bandwidth savings is especially important for supporting remote offices using thin WAN connections — as well as for service providers supporting massive volumes of VoIP traffic.

#### Full remote manageability.

Tenor switches provide complete configuration and management tools that enable you to provide fast, effective support — even when devices are located behind NAT firewalls. Tenor switches allow you to quickly perform essential management tasks remotely, and use your technical support resources more efficiently — allowing you to better ensure end-user/customer satisfaction.

#### The broadest range of solutions and configurations.

Quintum Tenors come in a variety of sizes and configurations to meet your real-world VoIP infrastructure requirements. From the Tenor AF Series, which provides solutions from two to eight ports, to Tenor CMS switches capable of scaling to 32 T1/E1/PRI trunks, Quintum delivers the perfect fit for your needs. You can also mix-and-match circuit and VoIP ports as needed and add whatever combination of FXO and FXS that best suit your gateway and/or backup implementations.



Tenor's MultiPath architecture allows Service Providers to easily deploy Tenors on the edge to integrate legacy equipment, providing connectivity to the local telephone networks, while assuring reliable, survivable, and hassle-free VoIP service to their customers.

Only the Tenor VoIP MultiPath Switch guarantees voice quality on VoIP calls. And, Quintum's Tenor VoIP MultiPath solution is extremely flexible and scalable, making it ideal for the wide range of environments and applications that exist in enterprises today. The Tenor provides full compliance with the H.323 IP telephony standard, ensuring its interoperability with leading third-party hardware and software, including unique technology such as SelectNet,™ PacketSaver,™ MultiPath Call Routing and NATAccess.™ The Survivable Tenor S delivers maximum survivability and is the most dependable SIP access solution.

#### **VolP Products**

**Tenor AF Series** offers small to medium sized businesses and remote offices with analog voice infrastructures a Tenor solution that offers combinations of 2 to 8 FXS and/or FXO ports.

**Tenor AX Series** is an all-in-one solution for businesses with analog voice infrastructures, scaling from 8 to 24 FXS and/or FXO ports, configurable in MultiPath, gateway, and enterprise configurations, or 48 FXO ports for larger trunking applications.

**Tenor BX Series** is perfect for enterprises using ISDN Basic Rate Interface (BRI) lines. The BX can support 2, 4, or 8 BRI S/T lines for up to 16 VoIP calls.

**Tenor DX Series** offers 2, 4, 6, or 8 T1/E1/PRI spans for up to 120 simultaneous VoIP channels, offering MultiPath or gateway configurations.

**Tenor Carrier MultiPath Switch (CMS)** is a slotted alternative for larger VoIP deployments, available in either a 2 or an 8 slot chassis, offering up to 32 T1/E1/PRI spans and up to 960 VoIP calls.

**Tenor GateKeeper+** is a standalone H.323 compliant gatekeeper designed to manage call routing and administration of any H.323 endpoints.

**Tenor Call Relay Session Border Controller** is offered in an enterprise version that supports up to 60 VoIP calls, and a service provider version that supports up to 672 VoIP calls. These SBCs support both H.323 and SIP, providing signaling translation and inter-networking.

**Tenor Monitor** is Quintum's extremely flexible, most user-friendly tool for monitoring alarms, call status, and CDRs on a Tenor-based VoIP network in real time.

Remote Management Session Server simplifies the configuration and management of remotely deployed Tenors, even if they are deployed behind an NAT Firewall. It allows administrators to configure, monitor, troubleshoot, and upgrade remote Tenors from a central location.

#### Discover why Quintum is the perfect fit.

Our unique and practical approach to VoIP implementation has made us the #2 provider of low-density VoIP gateways in the world. We have been honored with Frost & Sullivan's Product Differentiation Achievement Award and were named by Inc. Magazine as one of the country's 500 fastest-growing companies. No other vendor delivers a more cost-effective, hassle-free VoIP solution. So whether you're an enterprise seeking to reap the many benefits of VoIP across multiple locations, or a service provider looking to maximize your VoIP market share and operating margins, Quintum's Tenor solutions are the perfect fit for you.

