SmartNode™ 4950
Multi-Port T1/E1/PRI VoIP Enterprise Gateway Router

Connect legacy PBX systems to state-of-the-art IP telephony. Combining a VoIP Gateway with an IP Router, the SmartNode™ 4950 adds QoS and VPN security, making it the ideal solution for VoIP and Unified Communications.

Up to 120 VoIP calls…
with up to four T1/E1/PRI ports and dual Gigabit Ethernet ports.

Unified Communications Agent™
Provides any-to-any multi-path switching with VoIP and data survivability, VoIP-over-VPN security with AES/DES strong encryption, Internet Key Exchange (IKE), and SIP Registrar.

Secure Toll-Quality VOIP
Patton's DownStreamQoS™ and Voice-over-VPN with adaptive traffic management and shaping for maximum voice quality and secure voice communication.

Transparent Telephony Features
Complex number manipulation and mapping for seamless integration with existing infrastructures, CLIP, CLIR, hold, transfer and much more.

G.SHDSL.bis Broadband Access
Optional 4-wire 11.4 Mbps G.SHDSL.bis WAN interface.

Optional High Precision Clock
Delivers DECT PBX interoperability with reliable fax performance.

SmartNode™ Awards
- *2010 Internet Telephony Product of the Year: SmartNode™ 5400*
- *2009 Internet Telephony Product of the Year: SmartNode™ 4400 Series*
- *2008 Internet Telephony Product of the Year: SmartNode™ 4961*
- *2007 Internet Telephony Product of the Year: SmartNode™ S-DTA*
- *2006 Internet Telephony Product of the Year: SmartNode™ 4960*
- *2005 Internet Telephony Product of the Year: SmartNode™ 4630*

As enterprises move toward Unified Communications, the SmartNode™ 4950 offers a smooth transition to IP telephony by connecting your traditional phone equipment to next-generation VoIP networks and services.

Preserve your investment in legacy phone equipment while taking the next step toward Unified Communications. Least-cost call routing in Patton's proven SmartNode™ VoIP solutions optimizes monthly expenses while flexible dialed-numbering plans maintain established business processes.

The Unified Communications Agent™ (UCA) provides any-to-any multi-path switching (simultaneous SIP, H.323, ISDN, and POTS calls with routing and conversion between TDM/PSTN and IP/Ethernet networks—plus T.38 and SuperG3 FAX) combined with dial-backup and IP-link redundancy for VoIP and data survivability. Provide VoIP-over-VPN security with voice encryption via IPsec with AES/DES strong encryption and automated keying via Internet Key Exchange (IKE), plus SIP Registrar for presence/reachability.
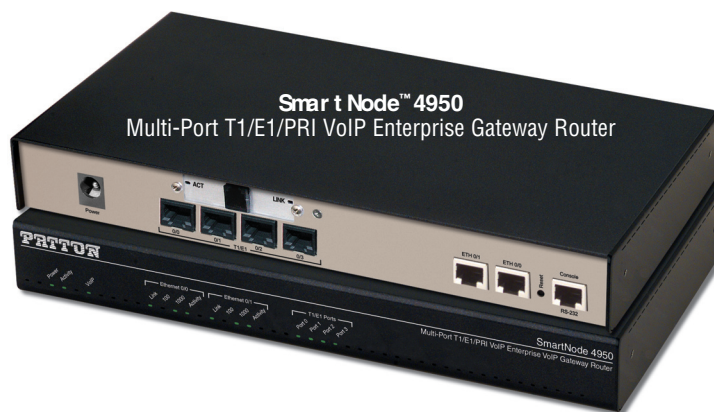
Advanced router functionality includes DownStreamQoS™ delivering the clear advantage of secure, uninterrupted voice-and-data communication.

Connect to any switch, PBX or data network with up to four T1/E1/PRI ports for up to 120 simultaneous calls using SIP, T1, E1 or PRI signaling. Like every SmartNode, the SN4950 supports all the industry-standard CODECs, delivering toll-quality voice on every call.
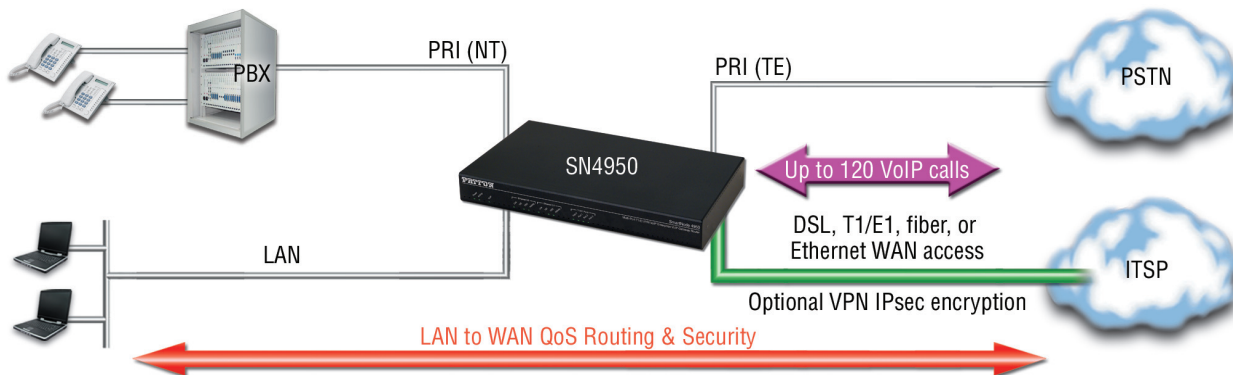
Ensure business continuity. Combining PSTN breakout with IP-link redundancy, SmartNode™ ensures voice-and-data survivability for reliable enterprise-class communications.

Additional options include Patton's unique high-precision clock enabling first-line IP telephony services in demanding ISDN and DECT environments with reliable FAX and modem performance. The SN4950 also offers optional built-in 11.4 Mbps broadband access via 4-wire G.SHDSL.bis that reduces hardware costs, simplifies network architecture and streamlines service and deployment.

Visit www.patton.com for more information.

Smart Node™ 4950
Multi-Port T1/E1/PRI VoIP Enterprise Gateway Router

PATTON®
Let's Connect!™

PRI (NT)

PBX

PRI (TE)

PSTN

SN4950

Up to 120 VoIP calls

DSL, T1/E1, fiber, or
Ethernet WAN access

ITSP

LAN

Optional VPN IPsec encryption

LAN to WAN QoS Routing & Security

*Specifications**

Voice Connectivity
Up to four software selectable T1/E1/PRI ports (NE/TE) • Signaling support (ISDN DSS-1, NI-2, Q.SIG, CAS Robbed bit loop and ground start, E&M, immediate, wink, double wink) • ISDN AOC/ECT • ISDN speech, audio & data (Fax Gr 4, UDI 64, RDI64) • ISDN supplementary services • SIPv2 & H.323v4 • CAS protocols: RBS (Loop start, ground start, E&M wink, intermediate, double-wink) and R2/MFC-R2 (Q.400–Q.490 and Configurable country profiles)

Broadband Access
4-wire G.SHDSL ITU-T G991.2, Annex A, B, F, G • Up to 11.4 Mbps • PPoE • 8PVCs, each UBR, CBR or VBR-rt selectable • I.610 OAM F4/F5 support • G.994.1 (G.hs)

Voice Processing
Codec G.711 a-law/mu-law, G.723, G.729ab, G.726, G.727, T.38 fax relay (9.6 k, 14.4 k) • G.711 transparent fax and bypass • 128 ms echo cancellation

Call Routing and Services
Regular expression call routing and manipulation • number blocking • short-dialing • digit collection, distribution and hunt groups

Data Interfaces
Dual 10/100/1000 TX Ethernet Ports • Autosensing • Auto-MDI • Full-duplex

IP Routing
Complete IP access router • DHCP Client & Server • Packet fragmentation • Static firewall, NAT, NAPT RFC 1631 access control lists • DMZ port

IP Quality of Service
Voice priority • DownStreamQoS™ • traffic management, shaping policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion 4,096

Management
Web/HTTP, CLI with local console & remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II and product MIB • Secure autoprovisioning for firmware & unit/subscriber configuration • Built-in diagnostic tools (trace, debug, call generator)

Power & Packaging
Desktop metal chassis
Dimensions: 11.0W x 1.5H x 7.0D in. (28.0W x 3.9H x 18.0D cm)
Weight: < 30 oz (850g)
External Power: 100–240 VAC (50/60 Hz)
Power Consumption < 15W

Operating Environment
Operating temperature: 32 to 104° F (0 to 40°C)
Operating humidity: up to 90%, non-condensing

Compliance
EMC: EN55022 and EN5502 • Safety: EN 60950 • CE • FCC Part 15 Class A; Part 68; CS-03

* Specifications subject to change without notice.

Ordering Info

SN4950 SmartNode T1/E1/PRI VoIP IAD: Hi-Capacity, 2x GigEthernet, External UI power
SN4950/1E15V/EUI: 1 E1/T1, 15 VoIP channels, upgradeable to 30 calls
SN4950/1E24V/EUI: 1 E1/T1, 24 VoIP channels, upgradeable to 30 calls
SN4950/1E30V/EUI: 1 E1/T1, 30 VoIP channels, non-upgradeable
SN4950/4E15V/EUI: 4 E1/T1, 15 VoIP channels, upgradeable to 60 channels
SN4950/4E24V/EUI: 4 E1/T1, 24 VoIP channels, upgradeable to 60 channels
SN4950/4E30V/EUI: 4 E1/T1, 30 VoIP channels, upgradeable to 60 channels
SN4950/4E48V/EUI: 4 E1/T1, 48 VoIP channels, upgradeable to 60 channels
SN4950/4E60V/EUI: 4 E1/T1, 60 VoIP channels, non-upgradeable
SN4950/4E96V/EUI: 4 E1/T1, 96 VoIP channels, field upgradeable to 120 channels
SN4950/4E120V/EUI: 4 E1/T1, 120 VoIP channels

Note: For complete ordering list, contact sales@patton.com

Options & Accessories
SNSW-49V6: 6 channel Voice Upgrade Key for SN4960 VoIP IADs. Software expansion for additional voice channels.
SNSW-VPN2: Software option for IPsec VPN, including DES/3DES and AES encryption, IKE and Voice-Over-VPN
SNSW-QSIG2: Support for ISDN Q.SIG.

*For G.SHDSL option: add 2GS in SKU (ex: SN4950/4E30V2GS/EUI)
*For High-Precision option: use SN4951 in SKU (ex: SN4951/4E30V/EUI)

WAN Options include G.SHDSL, X.21, Frame Relay, PPP, and ML-PPP over E1/T1
Relay Option: Between port 0/0 and port 0/1