



SmartNode™ 4970

T1/E1/PRI VoIP Gateway

IP-enable legacy PBX systems with an Enterprise-class SmartNode 4970 VoIP Gateway. Supporting up to 120 concurrent VoIP calls, the cost-effective SN4970 enables Enterprises to connect existing PBX systems with advanced IP telephony services and the PSTN.

15 to 120 VoIP calls

with up to four T1/E1/PRI ports and a single Gigabit Ethernet port.

Proven Interoperability

SIP interop with major IP PBX, Softswitch and VoIP Service Providers. Over 100,000 SmartNode deployments worldwide. ISDN/PSTN compliance in nearly every country.

Transparent Telephony Features

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

High Precision Clock

Delivers DECT PBX interoperability with reliable fax performance.

Flexible Mounting Options

The device can be placed on a desktop or installed in a 19-inch rack using the optional rack ear kit (INS-KIT-RACKEARS-11/19)

SmartNode™ Awards

- **2011 Internet Telephony Product of the Year:**
SmartNode™ 5400/2GS
- **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

The SmartNode™ 4970 VoIP Gateway offers Enterprises a cost-effective solution to IP-enable their legacy PBX systems. Evolving from Patton's award winning SmartNode 4940 Series, the next generation SmartNode 4970 Series comes now with IPv6 upgradeable hardware.

Like every SmartNode™, the SN4970 supports every industry-standard CODEC to deliver toll-quality voice on every call. 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). VoIP-over-VPN with voice encryption provides secure voice and data via IPsec with AES/DES strong encryption and automated keying via Internet Key Exchange (IKE). In addition, advanced call-router functionality includes least-cost call routing with flexible dialed-number plan support.

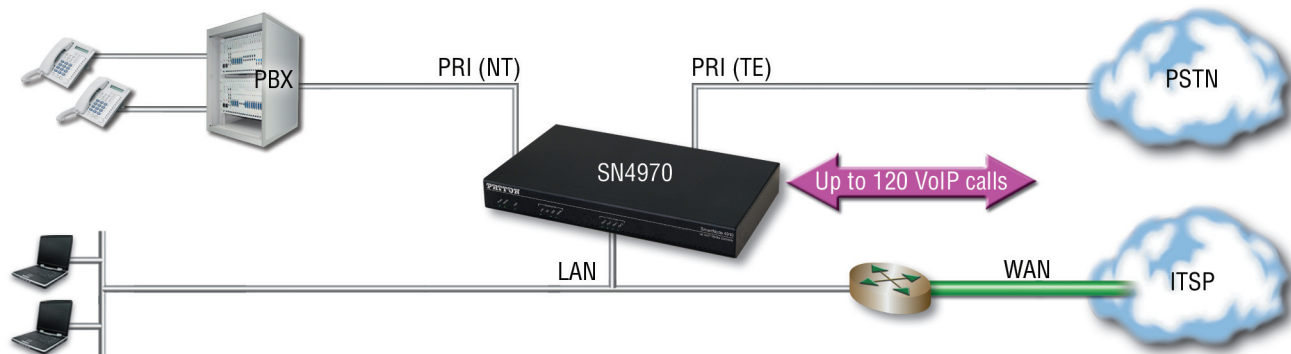
The SmartNode survivability suite offers PSTN fallback to ensure business continuity in case the IP network fails. Furthermore, SmartNode's unique high-precision clock delivers first-line IP telephony service in demanding ISDN and DECT environments with reliable FAX and modem performance. In addition, SmartNode delivers a smooth transition to VoIP with strong number portability support accepting incoming calls from the PSTN throughout the VoIP service provider's number porting process.

Preserve investments in legacy phone equipment while taking the next steps toward unified communications with the SN4970 VoIP Gateway. Providing 1 to 4 T1/E1/PRI and a 10/100/1000 Ethernet for up to 120 VoIP calls, the SN4970 delivers a reliable, cost-effective solution for the Enterprise.

Visit www.patton.com/smartnode for more information about the SmartNode 4970.



Application Diagram—Convert Legacy PBX to VoIP



Specifications*

PSTN

Up to four 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 • 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), fallback-relays on 4 port versions

VoIP

SIPv2 (SIP Info, Update, PRACK, Privacy, Refer), B2BUA, H.323v4 (H.235, Early H.245, H.245 tunneling, fast-connect)

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

One 10/100/1000 TX Ethernet Port • Autosensing • Auto-MDI • Full-duplex

Management

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

Power & Packaging

Desktop metal chassis

Dimensions: 30.1W x 4.5H x 18.1D cm (11.9W x 1.8H x 7.1D in.)

Weight: < 30 oz (850g)

Internal Power: 100–240VAC (50/60 Hz)

Power Consumption: < 15W

Operating Environment

Temp: 32 to 104°F (0 to 40°C)

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

SN4970 T1/E1/PRI VoIP Gateway: Hi-Capacity, 1 GigEthernet,

External UI power

SN4970/1E15V/EUI: 1 T1/E1/PRI, 15 VoIP channels, upgradeable to 30 calls

SN4970/1E24V/EUI: 1 T1/E1/PRI, 24 VoIP channels, upgradeable to 30 calls

SN4970/1E30V/EUI: 1 T1/E1/PRI, 30 VoIP Channels, non-upgradeable

SN4970...with Fallback Relay*

SN4970/4E15VR/EUI: 4 T1/E1/PRI, 15 VoIP channels, upgradeable to 60 channels

SN4970/4E24VR/EUI: 4 T1/E1/PRI, 24 VoIP channels, upgradeable to 60 channels

SN4970/4E30VR/EUI: 4 T1/E1/PRI, 30 VoIP channels, upgradeable to 60 channels

SN4970/4E48VR/EUI: 4 T1/E1/PRI, 48 VoIP channels, upgradeable to 60 channels

SN4970/4E60VR/EUI: 4 T1/E1/PRI, 60 VoIP channels, non-upgradeable

SN4970/4E96VR/EUI: 4 T1/E1/PRI, 96 VoIP channels, upgradeable to 120 channels

SN4970/4E120VR/EUI: 4 T1/E1/PRI, 120 VoIP channels, non-upgradeable

SN4970/4E30V120R/EUI: 4 T1/E1/PRI, 30 VoIP channels, upgradeable to 120 channels

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

Options & Accessories**

SNSW-49V1: 1 channel Voice Upgrade Key for SN4960 VoIP IADs. Software expansion for additional voice channels.

SNSW-49V6: 6 channel Voice Upgrade Key for SN4960 VoIP IADs. Software expansion for additional voice channels.

SMSW-49V9: 9 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.

INS-KIT-RACKEARS-11/19: 19-inch Rack Ear Kit

* Fallback relay between ports E1/T1 0/0 and 0/1 of all 4-port models

** For high-precision clock option, use **SN4971** in SKU (ex: **SN4971/4E30VR/EUI**)

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Let's Connect![™]

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