# SmartNode™ T1/E1/PRI VoIP Gateway

**Model 4970** 



Transport your legacy PBX in to the World of All-IP with an Enterprise-class SmartNode 4970 VoIP Gateway. Supports up to 120 concurrent VoIP calls, secure-zero-touch provisioning, TR-069 and much more.

#### 15 to 120 VoIP calls

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

#### Management & Provisioning

Web-based management, WEB Wizard, TR-069, SNMPv3, command line interface, auto-provisioning, separate config. domain support, secure zero-touch provisioning for configuration and software upgrades.

#### 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

he SmartNode™ 4970 VoIP Gateway offers Enterprises a cost-effective solution to integrate their legacy PBX systems in to an All-IP based Unified Communication environment with state of the art features such as IPv6, TR069, Patton Cloud Connect, Survivability features and much more.

Like every SmartNode™, the SN4970 supports every industry-standard CODEC to deliver tollquality voice on every call. The Unified Communications Agent™ (UCA) provides any-to-any multi-path switching (simultaneous SIP and ISDN calls with routing and conversion between TDM/PSTN and IP/Ethernet networks—plus T.38 and SuperG3 FAX).

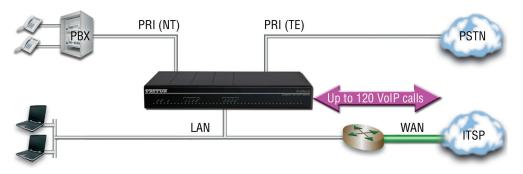
As an option the SN4970 can be Software upgraded to do VoIP-over-VPN\* with voice encryption providing secure voice and data via IPsec, OpenVPN or L2TP tunneling protocol in addition to SIP-TLS\* & SRTP\*. The advanced call-router functionality includes least-cost call routing with flexible dialed-number plan support.

The SmartNode survivability suite offers PSTN fallback to ensure business continuity in case the IP network fails. Furthermore, SmartNode's 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 All-IP 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.

### **Typical Application**





## SmartNode™ Model 4970 T1/E1/PRI VoIP Gateway



## 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 R2/MFC-R2 (Q.400-Q.490 and configurable country profiles), Fallback relays on four-port versions

#### VolP

SIPv2 over IPv4 & IPv6 (SIP Info, Update, PRACK, Privacy, Refer), B2BUA (max. 80 calls\*\*\*)

Optional SIP-TLS & SRTP\*, SIP Registrar\*, SIP Transcoding\*

#### Voice Processing

Codec G.711 a-law/mu-law, G.723, G.729ab, G.726, G727, 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

#### Connectivity

Single 10/100/1000Base-T Ethernet port Auto-MDIX DHCP Client DHCP Server PPPoE Client (multi-session) VLAN support

IPv4 & IPv6 Dual Stack

**ICMP** 

ACL, Stateful Firewall DNS, DynDNS SNTP Client VPN IPsec\*, L2TP\*, OpenVPN\*

#### 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, HTTP, HTTPs, TR-069
configuration & firmware loading
SNMP MIB 1, 2, 3 and product
MIB

Secure autoprovisioning for firmware & unit/subscriber configuration

Built-in diagnostic tools (trace, debug, call generator)

#### Power & Packaging

Desktop metal chassis Dimensions:

 $30.1W \times 4.5H \times 18.1D \text{ cm}$  (11.9W x 1.8H x 7.1D in.)

**Weight**: < 30 oz (850g)

Internal 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

### Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:

- web: https://www.patton.com/voip-gateway/sn4970/
- email: sales@patton.com
- tel: +1 301.975.1000



Specifications subject to change without notice.

- \* Additional charges apply for licensed features.
- \*\* Depending on model.

\*\*\* Supports up to 80 SIP-to-SIP sessions under ideal conditions. Transcoding, debugging, and/or IP routing reduce processing capacity.



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