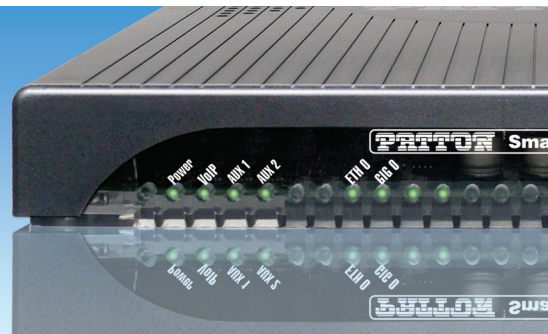# SmartNode™ E1/T1 PRI VoIP Gateway

Model 4170

Transport your enterprise phone system to the world of IP Telephony with the SN4170 T1/E1/PRI Gateway. Supports up to 30 concurrent G.711/ G.722 voice/fax calls with secure HTTPS, stateful firewall, and TLS/SRTP*.

From 15 to 30 VoIP calls
One or two ISDN PRI E1/T1 port. Up to 30 G.722,T.38 or G.711 calls simultaneously. Optionally SRTP* support for 30 calls.

Full Telephony Features
SessionRouter allows flexible call routing and numbering plan adaptations, CLIP/CLIR, hold, transfer, 3-way conferencing (Roadmap) and much more.

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.

Network Connectivity
One or two 10/100/1000 Ethernet ports with auto MDI-X Ethernet. Supports VLAN, TOS and Diffserv tagging. IPv4 & IPv6 support—dual stack.

Full VoIP protocol support
SIPv2, SIP v2 over TLS*, ISDN, DSS1, NI-2, QSIG*, T.38, G.722 HD voice, RTP Security with SRTP*, fax and modem bypass, DTMF relay.

Outstanding Interoperability
Interoperable for voice and T.38 fax with leading SIP service providers, soft-switch vendors, and various IP-PBXs.

Optional eSBC upgrade for PRI Gateways with 2 Ethernet Ports
Models containing "SN4171/2ETH" can be converted into high performance enterprise session border controllers (eSBC) simply by purchasing a software license. This capability prepares your voice network for next-generation SIP services and security.

For details about the upgraded SN4171 eSBC's capabilities, refer to the model SN5570 specifications.

The SN4170 is the next-generation ISDN E1/T1 model of the market-leading SmartNode VoIP product family. It fits perfectly the requirements of small and medium-sized enterprises looking for cost-effective ways to bridge PBX systems on multiple sites or connect them to a public Internet telephony service.

SmartNode's unique high-precision clock delivers first-line IP telephony service in demanding ISDN and DECT environments, along with reliable FAX and modem performance. Providing one or two E1/T1, one or two** Gigabit Ethernet port, and up to 30 VoIP calls, the SN4170 delivers a reliable solution for the Enterprise.

SN4170 Series gateways include WEB Wizard for quick configuration. You can build your own WEB interface using WEB Wizard functionalities.

The SmartNode 4170 is also the solution for service providers and network integrators looking for VoIP products that meet ISDN standards for features and quality.

SmartNode products provide seamless network integration, trouble-free operation, and cost-effective deployment to protect your investments in legacy phone equipment while taking the next steps toward unified communications with the SN4170 VoIP Gateway.

Visit www.patton.com for more information.

Network Integration

The SmartNode 4170 provides excellent VoIP and security features for seamless network integration. The E1/T1 PRI port is configurable to be TE or NT, you can connect your PSTN line or an ISDN PRI PBX.

VoIP Gateway Application

eSBC Software License Bundle

eSBC Application On /2ETH models (requires software license)
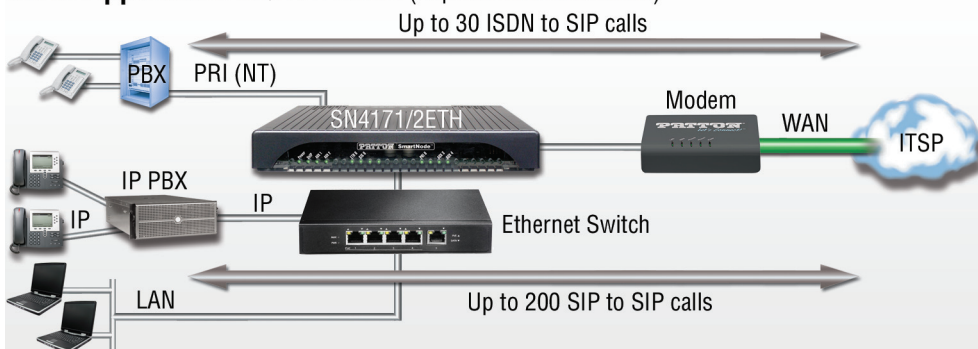
2-Ethernet-port upgradeable option

Specifications

Voice Signaling
SIPv2
SIPv2 over TLS*
SIP call transfer, redirect
Overlap or en-bloc dialing
DTMF in-band, out-of-band
Configurable tones

Call Routing & Services
Regular expression number matching
Regular expression number manipulation
Least Cost Routing
Number blocking
Short-Dialing
Digit collection
Distribution- and Hunt-Groups

ISDN
One E1/T1 PRI port, RJ-45 (NE/TE)
DSS1, Q.921, Q.931, NI-2
HP High Precision Clock
Stratum 3 CO
Optional QSIG support*

Voice Processing
G.722

G.711m/A-law
G.723.1 (6.4Kbps)
G.729, 729a, 729ab (8 kbps)
G.726 (16, 24, 32, 40 kbps)
iLBC at 13.33 & 15.2 kbps
G.168-2004 echo cancellation (128 ms)
30 simultaneous HD voice G722, G.711 or T.38 fax calls
30 calls with SRTP
Transparent ISDN data
Up to 200 SIP to SIP calls***
Silence suppression and comfort noise
Adaptive and configurable dejitter buffer
Configurable packet length

Packet Tagging and VLAN
IEEE 802.1p, IEEE 802.1Q, 4096 VLANs
(Tag insertion/deletion), TOS, DiffServ Labeling

Connectivity
One or two** 10/100/1000Base-T Ethernet port
Auto-MDIX

1 USB 2.0 host port
DHCP Client
DHCP Server
PPPoE Client (multi-session)
VLAN support
IPv4 & IPv6 Dual Stack
ICMP
ACL, Stateful Firewall
DNS, DynDNS
SNTP Client

Management
Web-based GUI
WEB Wizard
Fully Documented CLI
Telnet and HTTP access
TFTP, HTTP, HTTPS, TR-069 configuration up- and download
TFTP, HTTP, HTTPS, TR-069 firmware upgrade
SNMPv3 agent
Separate config domain (LAN side config and WAN side config) (MIB II and private MIB)
Built-in diagnostic tools
Secure Auto-Provisioning with built in root CA

Power & Packaging
Power Consumption < 10W
Desktop/Wallmount plastic chassis

Physical
Size: 20.8W x 3.4H x 16.5D cm (8.2W x 1.3H x 6.5D in.)
Weight: <450g (15.9 oz)

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

Compliance
FCC Part 15, Class A
EN55022, Class A
EN55024
Safety
UL60950-1/CSA C22.2 No. 60950-1
IEC/EN 60950-1, 2nd edition
AS/NZS 60950-1

Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:
- web: **http://www.patton.com/products/product_detail.asp?id=523&tab=Ordering**
- email: **sales@patton.com**
- tel: **+1 301.975.1000**

Specifications subject to change without notice.

07MSN4170-DS2

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

*** Supports up to 200 SIP-to-SIP sessions underideal conditions. Transcoding, debugging, and/or IP routing reduce processing capacity.