



## SmartNode™ 4120

### Single/Dual-Port ISDN BRI VoIP Gateway

*Enables any IP-PBX and UC System to connect to the public ISDN Network. The compact, reliable design provides a feature rich and flexible integration of BRI lines into any VoIP system at an affordable price.*

#### Up to Four Simultaneous SIP or T.38 Calls

*With 1/2 ISDN So BRI ports and one 10/100Base-TX Ethernet port.*

#### Proven Interoperability

*Standard ISDN compliant and Interoperable with a wide range of IP-PBX and Unified Communication Systems.*

#### Comprehensive Signaling Protocol Support

*Supports SIP, H.323, ISDN telephony plus T.38 and SuperG3 FAX over TDM/PSTN and IP/Ethernet services simultaneously.*

#### Transparent ISDN Features

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

#### Management & Provisioning

*Built-in Web-based management, SNMP, command line interface (CLI) and auto-provisioning for automated configuration distribution and software upgrades. RADIUS for call detail records (CDR) and user authentication.*

#### 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

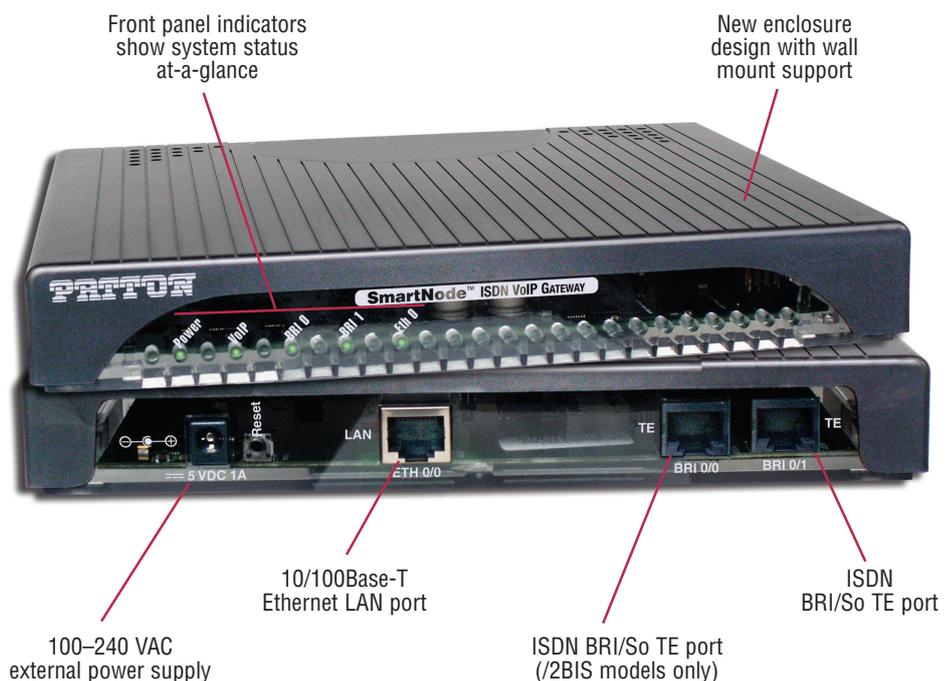
The SmartNode™ 4120 ISDN BRI PSTN Gateway converts up to four simultaneous phone or T.38 fax calls from SIP to ISDN BRI. It is a compact reliable standalone VoIP gateway for IP-based voice systems that delivers ISDN performance and quality.

For system integrators looking to connect a VoIP or Unified Communication solution to public or private ISDN lines, the SmartNode 4120 provides unparalleled ISDN to IP feature preservation. Like any SmartNode the 4120 provides advanced ISDN functionality such as Explicit Call Transfer (ECT) support and Advice of Charge (AOC) over SIP. Patton CPEs are interoperable with most IP PBX and Unified Communication vendors such as Asterisk,

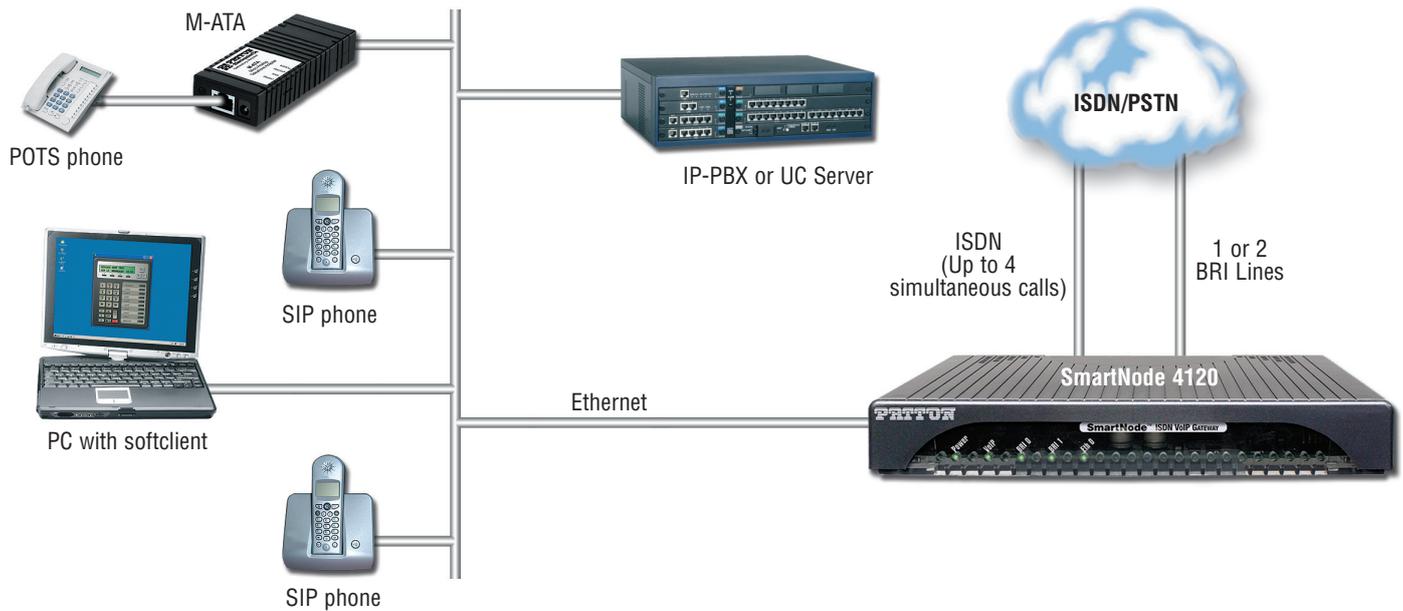
3CX, Elastix, Microsoft, IBM, Swyx, SNOM One and many others.

Compared to PC-based solutions that combine IP PBX and a PCI BRI cards, the SmartNode has several advantages, including: installation without additional drivers or software, operation without ventilation or hard disk, scalable without limitation, and service integration without downtime. SmartNode gateways can be combined in a cluster for simple and flexible redundancy solutions not available with PCI BRI cards. System administrators don't have to learn ISDN as industry standard protocols like SIP do the job of connecting the PSTN to your VoIP system.

Visit [www.patton.com](http://www.patton.com) for more information.



## Typical Application



## Specifications\*

### LAN Connectivity

10/100Base-T Ethernet LAN • Auto-MDI-X • DHCP Client • PPPoE Client (multi-session) • SNMP • IP Multinetting • VLAN

### IP Quality of Service

IEEE 802.1p, TOS, DiffServ Labeling • IEEE 802.1Q, VLAN Tag insertion/deletion (4,096 VLANs)

### Management

Web-based GUI • Fully documented CLI • Telnet and HTTP access • TFTP configuration upload and download • TFTP/HTTP firmware upgrade • SNMP agent, MIB II and enterprise MIB • Built-in diagnostic tools • Auto-provisioning—configuration and firmware

### Fax and Modem Support

T.38 fax over IP • Fax relay and bypass • Modem bypass

### ISDN Specification

1/2 port Euro-ISDN BRI/So RJ-45, TE • DSS-1, Q.921, Q.931 • Point-to-point & point-to-multipoint.

### Voice Signaling

SIPv2 • H.323v4 • SIP call transfer, redirect • Overlap or en-bloc dialing • DTMF in-band & out-of-band • Configurable call progress tones • CLIP • CLIR • AOC • PARE

### Call Routing & Services

Regular expression number matching • Regular expression number manipula-

tion • Least Cost Routing • Number blocking • Short-Dialing • Digit collection • Distribution-Groups & Hunt-Groups • 2nd call offering

### Voice Processing

G.711 • G.723.1 (5.3/6.3 kbps) • G.729, G.729a, G.729ab (8 kbps) • G.726 ADPCM (16, 24, 32, 40 kbps) • G.168 echo cancellation (25 ms) • Transparent ISDN data • Silence suppression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

### Power Consumption

< 4W

### Dimensions

20.8W x 3.4H x 16.5D cm  
(8.2W x 1.3H x 6.5D in.)

### Weight

< 450 g (15.9 oz)

### Operating Temperature

0 to 40°C (32 to 104°F)

### Humidity

Up to 90%, non condensing

### Compliance

FCC Part 15 Class B (US EMC) • CE per RTTE 99/5/EC (EMC and LVD) • Safety EN60950 • TBR-3 (ISDN BRI/So)

## Ordering Information

**SN4120/1BIS2V/EUI:** SmartNode™ ISDN BRI PSTN VoIP Gateway, 1 BRI/So TE, 2 voice/fax calls, 1x 10/100 Ethernet, external UI power (100–240 VAC), 1-year warranty.

**SN4120/2BIS4V/EUI:** SmartNode™ ISDN BRI PSTN VoIP Gateway, 2 BRI/So TE, 4 voice/fax calls, 1x 10/100 Ethernet, external UI power (100–240 VAC), 1-year warranty.

\* Specifications subject to change without notice.

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