



# ISDN BRI PSTN Gateway

## SmartNode™ 4554

The Patton® SmartNode™ 4554 ISDN VoIP PSTN gateway enables any IPBX or IP phone system to seamlessly connect to the ISDN PSTN. The compact, reliable design allows easy and flexible integration of BRI lines into any VoIP system.

### Four Simultaneous SIP or T.38 calls

Connects an IP PBX or other VoIP systems to the ISDN PSTN with 2 BRI TE ports and 4 simultaneous voice or fax calls.

### Full VoIP Support

Supports the complete range of industry standard VoIP: SIP, T.38 Fax, Fax and modem bypass, DTMF relay, Codecs G.729, G.723, and G.711.

### Transparent Telephony Features

Preserves ISDN features like caller ID and name (CLIP/CLIR), call transfer, hold, waiting, ECT, AOC. Supports DDI and MSN lines in all major countries as well as complex numbering plan manipulations.

### Outstanding Interoperability

Interoperable for voice and T.38 fax with Asterisk™, 3CX™, PingTel™ and other leading IP PBX systems.

### Management & Provisioning

Built-in Web-based management, SNMP, Command Line Interface and Auto-Provisioning for automated configuration distribution and software upgrades.

The SmartNode™ 4554 ISDN BRI PSTN Gateway converts up to four simultaneous phone or T.38 fax calls from SIP to BRI ISDN. It is a compact reliable stand-alone VoIP gateway for IP-based voice systems that delivers ISDN performance and quality.

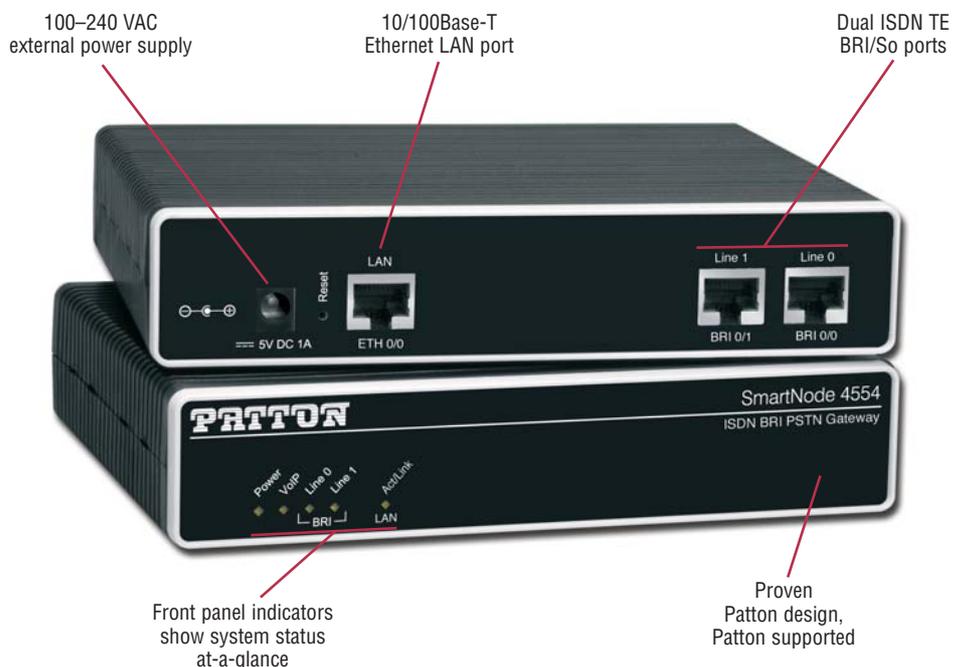
For system integrators looking for a VoIP solution with ISDN connectivity, the SmartNode 4554 provides unparalleled ISDN to IP preservation. The SmartNode provides advanced ISDN functionality such as Explicit Call Transfer (ECT) support, and Advice of Charge (AOC) over SIP. Patton CPEs are also interoperable with several leading IP PBX vendors such as Asterisk, 3CX, and SIP Foundry.

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. SmartNodes 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.

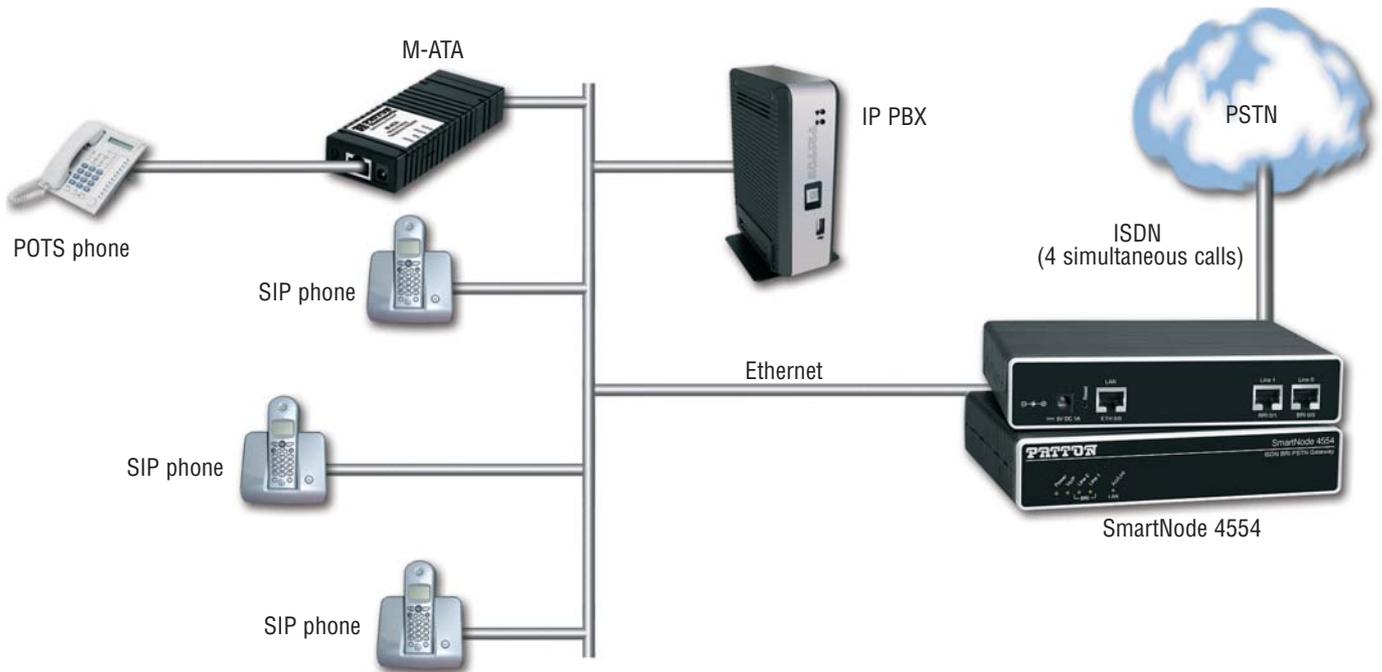


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## Typical Application



## Specifications

### WAN Connectivity

10/100Base-T Ethernet WAN • Auto-MDI-X • DHCP Client • PPPoE Client (multi-session) • SNTp • IP Multi-Netting

### IP Quality of Service

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

### Management

Web-based GUI • Fully documented CLI • Telnet and HTTP access • TFTP configuration up- and download • TFTP firmware upgrade • SNMPv1 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

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

### Voice Signaling

SIPv2 • MGCP/IUA • SIP call transfer, redirect • Overlap or en-bloc dialing •

DTMF in-band & out-of-band • Configurable call progress tones

### Call Routing & Services

Regular expression number matching • Regular expression number manipulation • Least Cost Routing • Number blocking • Short-Dialing • Digit collection • Distribution- & Hunt-Groups • 2nd call offering

### Voice Processing

G.711\_/A-law • 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 (25ms) • Transparent ISDN data • Silence sup-

pression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

### Dimensions

4.2W x 1.5H x 5.0D in. (10.6W x 3.9H x 12.7D cm) • Weight: < 15.9 oz (450 g) • Power Consumption < 4W

### Environment

Temp.: 32–104°F (0–40°C) • Humidity: up to 90% , non condensing

### Compliance

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

## Ordering Information

**SN4554/2BIS/EUI:** ISDN BRI PSTN VoIP Gateway, 2 BRI S0 TE ports, 1 Ethernet port, 4 simultaneous SIP/H.323 and T.38 calls, 100–240 VAC external power supply, 1-year warranty.

### Options & Accessories

**SNSW-VPN1:** License Key for IPsec VPN support (DES, 3DES, AES)

**SNSW-QSIG1:** License Key for QSIG support

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07MSN4554-DS3

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