

# SoHo ISDN VoIP IAD

# SmartNode™ 4552 BRI Gateway Router

The SmartNode<sup>™</sup> 4552 is the single-box CPE solution for integrating data access with voice & fax over any broadband access network. Combining two simultaneous voice/fax gateway calls with a feature rich broadband QoS IP Router, the SmartNode 4552 is perfect for the SoHo, SME and ITSP user requiring cost-effective digital voice and data access.

#### 2 Channel VoIP that Works

2-channel VoIP Media Gateway and router with dual ISDN BRI/SO ports with NT and TE support.

## **Transparent Telephony Features**

SessionRouter™ with enhanced circuit-switched call routing allows user programmable call handling based on hunt groups, caller/called ID, and time of day. Pass local PSTN call through without packet conversion.

## SIP, H.323, and MGCP

All SmartNodes support industry standard call control signalling with standards-based compatibility.

## **Complete Access Routing**

Fast-Ethernet WAN and integrated 4-port 10/100 LAN switch with auto MDI-X. Access router with NAT, Firewall, PPPOE, DHCP, and DynDNS.

# **Quality of Service**

Advanced adaptive traffic management and shaping for maximum voice quality. Voice and data prioritization and DownStreamQoS<sup>™</sup>.

# **Management & Provisioning**

Built-in Web based management, SNMP, Command Line Interface and Auto-Provisioning for automated configuration distribution and software upgrades. he SmartNode 4552 enables integration of ISDN network users into their local phone service, a remote PBX and the data/VPN network through a single tightly integrated access device.

Connecting to the local ISDN Phone as well as the local PSTN port, Patton's SessionRouter™ technology links any standard ISDN telephone or PBX to VoIP while still connecting to legacy PSTN services. Built-in Lifeline support ensures phone connection to the PSTN in the event of failure. Gateway functions use standard CODECs such as G.723 and G.729 as well as industry standard SIP, H.323 and MGCP/IUA to ensure seamless connection and compatibility for all voice services.

Broadband network connectivity integrates with any fixed IP, DHCP or PPPoE service. An integrated 10/100 Ethernet

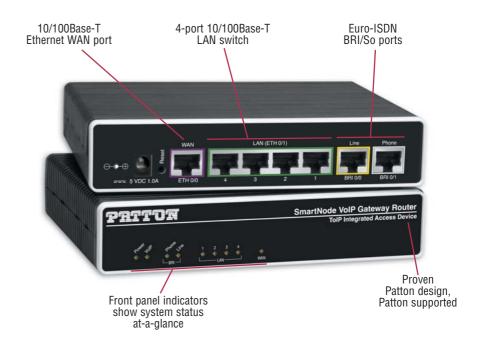
LAN switch, with advanced routing features such as NAT, Firewall/ACL, DynDNS as well as optional IPsec VPN, fulfills the require-



Special Rates Available Call for Details

ments of demanding network users.

Quality of Service (QoS) features complete the offering with advanced voice prioritization and traffic management. Patton's patent-pending DownStreamQoS™ ensures voice without interruptions even over best-effort Internet connections. Visit www.patton.com for more information.





# **Network Integration**



# Specifications\*

## **LAN and IP Services**

4-port 10/100Base-T LAN Switch • Auto-MDI-X • IPv4, RIPv2, ICMP • Dynamic and static NAT and NAPT • ACL Firewall • DNS, DynDNS • DHCP Server • SNTP Client • Optional IPsec VPN (DES, 3DES, AES)

#### **WAN Connectivity**

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

## **IP Quality of Service**

Voice priority, DownStreamQoS™ •
Traffic Management, shaping policing •
IEEE 802.1p, TOS, DiffServ Labeling •
IEEE 802.1Q, 4096 VLANs (Tag insertion/deletion)

#### **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

## **ISDN Specification**

2 ports Euro-ISDN BRI/So RJ-45 • 1 NT port/1 TE port • DSS-1, Q.921, Q.931 • Point-point and point-multipoint • Lifeline Bypass Relay TE port to NT port • Optional QSIG support

#### **Voice Signaling**

SIPv2 • H.323v4 • MGCP/IUA • SIP call transfer, redirect • Overlap or en-bloc

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

## **Fax and Modem Support**

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

## **Call Routing & Services**

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

## **Voice Processing**

G.711µ/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 suppression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

#### **Power & Packaging**

**Dimensions:** 4.2W x 1.5H x 5.0D in. (10.6W x 3.9H x 12.7D cm)

 $\label{eq:weight: 40} \textbf{Weight:} < 15.9 \text{ oz } (450 \text{ g}) \\ \textbf{Power Consumption} < 4W$ 

## **Operating Environment**

Temperature: 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

SN4552/2BIS/EUI: 2-port ISDN BRI VoIP Gateway-Router, 10/100Base-T WAN, 4-port 10/100Base-T switch 100-240VAC external power supply

Note: Standard firmware includes SIP signaling protocol. H.323 or MGCP/IUA firmware can be requested at order time, or downloaded free of charge from <a href="http://upgrades.patton.com">http://upgrades.patton.com</a>.

# **Options & Accessories**

PM-BRI-EXT: External S-Bus Phantom-Power Supply 40V DC for Phone only (not

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

SNSW-QSIG1: License Key for QSIG support

SNSW-REG: SIP Registrar

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<sup>\*</sup> Specifications subject to change without notice.