



# IpChannel Bank Multi-Port FXS or FXO Gateway-Router SmartNode<sup>™</sup> 4400 Series

The cost-effective Gateway-Router solution to tie in 12 to 32 analog phones, fax or PSTN trunk lines to your IP environment.

#### 12, 16, 24 or 32 FXS

•Simultaneous voice or fax calls on all ports. Advanced local call switching.

#### Full SIP and T.38 support

Supports the complete range of industry standard VoIP: SIP, H.323, T.38 fax, fax and modem bypass, DTMF relay. Codecs G.729, G.723 etc.

#### Secure Toll-Quality VolP

DownStreamQoS and Voice-over-VPN with adaptive traffic management and shaping for maximum voice quality and secure voice communication.

#### **Complete Access Routing**

*Two 10/100 Ethernet ports with auto MDI-X. Access router with NAT, Firewall, PPPoE, DHCP, DynDNS, multiple VLANs & VPN with IPsec\** 

#### **Outstanding Interoperability**

Interoperable for voice and T.38 fax with leading SIP service providers, soft-switch vendors and Asterisk™ IP-PBX he SmartNode<sup>™</sup> 4400 VoIP Gateway-Router provides 12 to 32 analog FXS or FXO interfaces to connect phones, fax or PSTN trunk lines to your IP-based communications (IP PBX, UC systems and SIP Trunks).

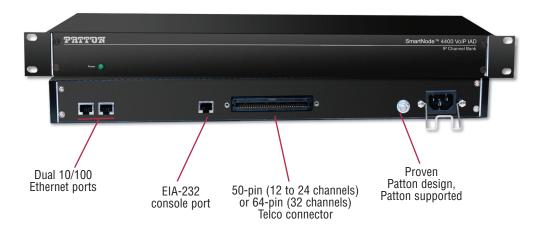
Like every SmartNode<sup>™</sup>, the SN4400 supports every industry-standard CODEC to deliver toll-quality voice on every call. The Unified Communications Agent<sup>™</sup> (UCA) provides any-to-any multi-path switching (simultaneous SIP, H.323, ISDN, and POTS calls with routing and conversion between TDM/PSTN and IP/Ethernet networks—plus T.38 and SuperG3 FAX). VoIP-over-VPN with voice encryption provides secure voice and data via IPsec with AES/DES strong encryption and automated keying via Internet Key Exchange (IKE). In addition, advanced call-router functionality includes least-cost call routing with flexible dialed-number plan support.

The SmartNode survivability suite combines PSTN fallback, SIP Registrar and IP-link redundancy to ensure business continuity in case the IP network fails. Patton's DownStreamQoS<sup>™</sup> delivers the advantage of clear, uninterrupted voice-and-data communication. In addition, SmartNode delivers a smooth transition to VoIP with strong number portability support accepting incoming calls from the PSTN throughout the VoIP service provider's number porting process.

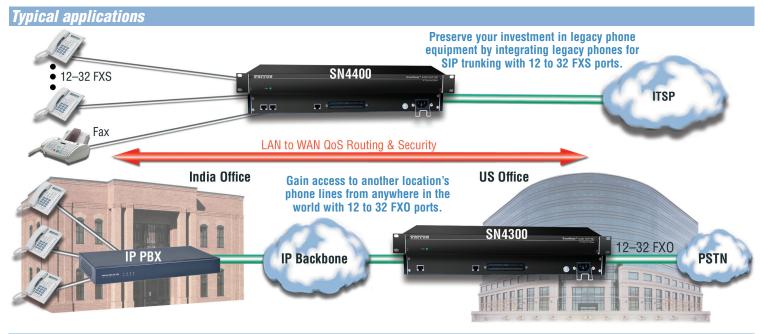
**Preserve investments** in legacy phone equipment while taking the next steps toward unified communications with the SN4400 VoIP Gateway-Router. Providing 12 to 32 FXS or FXO interfaces and two 10/100/1000 Ethernet, the SN4400 with built-in IP Router delivers secure, prioritized unified communications.

Need a carrier upgrade? The SmartNode 4900 adds a redundant power supply, WAN interfaces, cooling fans and 0–50° C operating temperature.

Visit <u>www.patton.com/smartnode</u> for more information.







#### Specifications\*

#### Capacity

12, 16, 24, 32 simultaneous VoIP calls

#### **Data Services**

Two 10/100 Ethernet ports Complete IP access router • DHCP Client & server • Packet fragmentation • Static firewall, NAT, NAPT RFC 1631 access control lists • DMZ port

#### **Quality of Service**

Voice priority • DownStreamQoS™ • Traffic management, shaping and policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q,

VLAN tag insertion/deletion (4096 VLAN IDs, mul-

#### Management

Web/HTTP, CLI with local

#### **FXS Connectivity**

\* Specifications subject to change without notice.

tiple VLAN support

console and remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II and product MIB • Secure autoprovisioning for both firmware and unit/subscriber configuration • Built-in diagnostic tools (trace, debug, call generator)

2-wire Loopstart on 50pin

(12 to 24 channels) or

64pin (32 channels) Telco connector • Short haul loop 1.1km @3REN • EuroPOTS (ETSI EG201188) • Programmable AC impedance, feeding, ring and on-hook voltage • Caller-ID FSK and ITU V.23/Bell 202 generation

#### **FXO Connectivity**

2-wire Loopstart on 50pin (12 to 24 channels) or 64pin (32 channels) Telco connector • Programmable impedance, ring detection, tone detection, disconnect supervision • Caller ID detection

#### **Voice Signaling**

SIPv2 H.323v4 (simultaneously with B2BUA capability) • SIP call transfer, redirect • DTMF in-band & out-of-band • All tones programmable (dial, ringing, busy)

#### **Call Switching and Services**

Regular expression based call routing and number manipulation • Number blocking . Short-dialing . Digit collection, distribution and hunt groups • transparent line extension

SN4432/JO/UI: 32 FXO VoIP GW-Router,

2 x 10/100Base-TX, UI Power. Under

Accessories, look for this symbol:

Accessories, look for this symbol:

2 x 10/100Base-TX, UI Power. Under

Accessories, look for this symbol: ✓

Accessories

your model

SN4432/JS/48: 32 FXS VoIP GW-Router,

2 x 10/100Base-TX, 48V DC Power. Under

SN4432/JS/UI: 32 FXS VoIP GW-Router.

Choose the color-coded symbol ( $\checkmark$ ) for

10-3096TM50/16RJ11-12: 12 FT Cable (50 PIN TELCO-to-16 RJ11) 🗸

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#### **Voice Processing**

CODEC G.711 a-law/mulaw, G.723, G.729ab • G.726. G.727. T.38 fax relay • G.711 transparent fax and bypass

#### **System**

CPU Motorola MPC875 @ 133 MHz • Memory 32MB SDRAM/8MB Flash

#### **Dimensions**

19-in. rack-mount chassis 48.3W x 4.44H x 30.5D cm

#### Weight

4.1 kg

#### Power

100-240 VAC (50/60 Hz) · Power dissipation: > 22W (60W max, model SN4432/JS/RUI)

#### Temperature

32-104°F (0-40°C)

#### Humidity

Up to 90% (noncondensing)

#### **Compliance**

EMC compliance: EN 55022 and EN 55024 • Safety compliance: EN 50950 • CE compliance • FCC Part 15 Class A • RoHS

### **Ordering Info** SmartNode IpChannelBank VolP

## **Gateway (GW)-Router**

SN4412/J0/UI: 12 FXO GW-Router, 2 x 10/100Base-TX, UI Power. Under Accessories, look for this symbol: SN4412/JS/48: 12 FXS GW-Router, 2 x 10/100Base-TX, 48V DC power. Under Accessories, look for this symbol: SN4412/JS/UI: 12 FXS VoIP GW-Router,

2 x 10/100Base-TX, UI Power. Under Accessories, look for this symbol: SN4416/JO/UI: 16 FXO VoIP GW-Router.

2 x 10/100Base-TX, UI Power. Under Accessories, look for this symbol:



#### 07MSN4400-DS7

Patton is a registered trademark and the termsSmartNode, DownStreamQoS, and SessionRouter are trademarks of Patton Electronics Company in the United States and other countries.

SN4416/JS/48: 16 FXS VoIP GW-Router. 2 x 10/100Base-TX, 48VDC Power. Under Accessories, look for this symbol: 🗸 SN4416/JS/UI: 16 FXS VoIP GW-Router, 2 x 10/100Base-TX, UI power. Under Accessories, look for this symbol: 🗸 SN4424/JO/UI: 24 FXO VoIP GW-Router, 2 x 10/100Base-TX, UI Power. Under Accessories, look for this symbol: 🗸 SN4424/JS/48: 24 FXS VoIP GW-Router, 2 x 10/100Base-TX, 48V DC Power. Under Accessories, look for this symbol: 🗸 SN4424/JS/UI: 24 FXS VoIP GW-Router, 2 x 10/100Base-TX, UI Power. Under Accessories, look for this symbol: 🗸

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#### Planet Communications Asia PLC.

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10-3096TM50/16RJ45-12: 12 FT Cable (50 PIN TELCO-to-16 RJ45) 🗸

10-3096TM50/50-12: 12 FT Cable (50 PIN TELCO-to-50 PIN TELCO) 🗸 🗸

10-3096TM50-20: 20 FT Cable (50-pin TELCO-to-25 unterminated) 🗸 🗸

10-50TELCO/24RJ11-6: 6 FT Cable (50 PIN TELCO-to-24 RJ11) 🗸 🗸

10-50TELCO/24RJ45-6: 6 FT Cable (50 PIN TELCO-to-24 RJ45) 🗸 🗸

10-493264-10: 10 FT Cable (64 PIN TELCO-to-32 unterminated) 🗸

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