IpChannel Bank Multi-Port FXS or FXO Gateway-Router

SmartNode™ 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 or FXO

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 VoIP

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.

The SmartNode™ 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™, the SN4400 supports every industry-standard CODEC to deliver toll-quality voice on every call. The Unified Communications Agent™ (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™ 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 www.patton.com/smartnode for more information.

Dual 10/100 Ethernet ports

EIA-232 console port

50-pin (12 to 24 channels) or 64-pin (32 channels) Telco connector

Proven Patton design, Patton supported

PATTON ®

Let's Connect!™

Preserve your investment in legacy phone equipment by integrating legacy phones for SIP trunking with 12 to 32 FXS ports.

- 12–32 FXS
- Fax

SN4400

ITSP

LAN to WAN QoS Routing & Security

India Office

Gain access to another location's phone lines from anywhere in the world with 12 to 32 FXO ports.

US Office

IP PBX

IP Backbone

SN4400

12–32 FXO

PSTN

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, multiple VLAN support

Management
Web/HTTP, CLI with local 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)

FXS Connectivity
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 64-pin (32 channels) Telco connector • Program-mable 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, distribu-

tion and hunt groups • transparent line extension

Voice Processing
CODEC G.711 a-law/mu-law, 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 30.5 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% (non-condensing)

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

* Specifications subject to change without notice.

SmartNode IpChannelBank VoIP Gateway (GW)-Router

SN4412/JO/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: ✓

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: ✓

SN4432/JO/UI: 32 FXO VoIP GW-Router, 2 x 10/100Base-TX, UI Power. Under *Accessories*, look for this symbol: ✓

SN4432/JS/48: 32 FXS VoIP GW-Router, 2 x 10/100Base-TX, 48V DC Power. Under *Accessories*, look for this symbol: ✓

SN4432/JS/UI: 32 FXS VoIP GW-Router, 2 x 10/100Base-TX, UI Power. Under *Accessories*, look for this symbol: ✓

Accessories
Choose the color-coded symbol (✓) for your model

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

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) ✓