



# SmartNode™ 4110 Series

## Multi-Port FXS/FXO VoIP Gateway

The SmartNode 4110 VoIP Media Gateway supports up to eight telephone connections integrating PSTN, PBX, and standard phones for voice and fax over any IP network. Now the corporate, small, or remote office can use voice-over-packet services to eliminate toll charges, access local PSTN calling, and secure voice traffic end-to-end.

### Up to 8 FXS and/or FXO ports

Compact, reliable stand-alone VoIP gateway with different port options. Supports simultaneous voice or fax calls on all ports.

### Advanced Local Call Switching

Virtual interfaces and routing tables provide industry leading flexibility in call handling programming. Local call switching, soft fallback to alternative routes. Simultaneously connects to multiple SIP services/IP PBXs.

### Complete SIP and T.38 support

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

### Easy Management & Provisioning

Web-based management, SNMP, command line interface. Automated mass provisioning for efficient large-scale deployments.

### Outstanding Interoperability

Proven integration for voice and T.38 fax with 3CX®, Asterisk™, PingTel™ and other leading IP PBX systems and soft switch vendors.

### 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 4110 VoIP Media Gateway supports up to eight transparent phone calls while leveraging VoIP for lower-cost carrier and corporate access. Connecting to any analog phone, fax, or PBX, the SN4110 is an effective and flexible solution for toll-bypass, remote/branch office voice connectivity, and enhanced carrier services.

The SN4110 series is the perfect choice for phone-to-IP connectivity supporting up to 8 FXS ports or a combination of 4 FXS and 2 or 4 FXO ports. With its FXS analog ports, the SN4110 connects to any legacy telephone or PBX and provides dial-tone, ringing, and caller-ID. When equipped with FXO ports, the local PSTN can be accessed enabling local calling and enhanced toll-bypass applications while using a single connected telephone. Flexible call integration allows per-port tele-

phone numbers, programmable call progress tones, and distinctive ringing. With Telephony-over-IP (ToIP) call switching, calls can automatically select the least-cost-route while providing flexible numbering plans and end-to-end feature transparency. PPPoE, DHCP, and VLAN offers universal IP connectivity and optional IPsec VPN with AES/3DES guarantees secure voice over the public network.

Patton's SmartNode 4110 delivers the legacy phone interfaces, service transparency, and flexible PSTN integration required for true converged packet voice.

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



Special Rates Available  
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Proven  
Patton design,  
Patton supported

EIA-232  
console port



Front panel indicators  
show system status  
at-a-glance

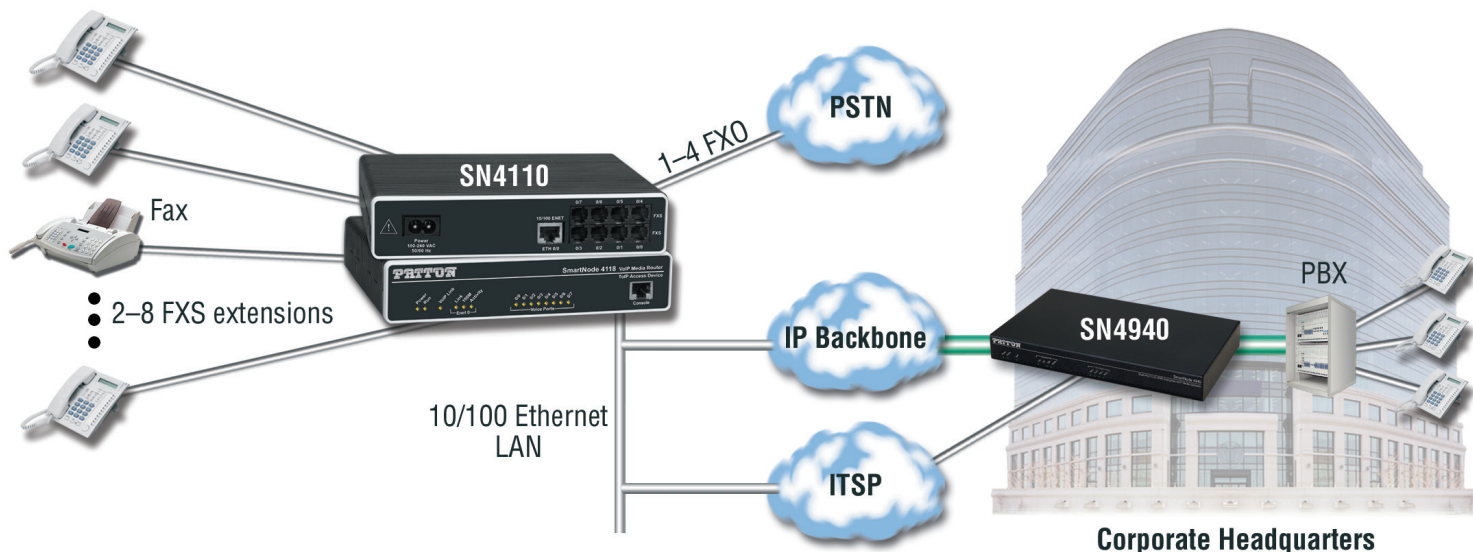
10/100Base-T  
Ethernet LAN port

FXS and/or  
FXO ports

## Typical Application

In enterprise networks, transparent access to PBX features while using existing equipment is key to low-cost operations. Now, instead of installing a separate PBX at the remote office, the SmartNode 4110 is able to provide transparent extension while simultaneously connecting multiple locations. The extensions can be managed centrally and benefit

from PBX services such as calling groups, least cost routing, and call forwarding. PSTN access allows local calls to be processed without using corporate remote PBX resources. Additionally, the corporate PBX can break-out and bypass any long distance charges by using the remote office for the local gateway.



## Specifications

### Capacity

Up to 8 simultaneous VoIP or T.38 fax calls (depending on the model)

### Voice Signaling

H.323v4, SIPv2 (B2BUA capable, multi-instance, simultaneous support of multiple registrars and direct IP dialing) • SIP call transfer, redirect • DTMF in-band & out-of-band • All tones programmable (dial, ringing, busy)

### Voice Processing

CODEC G.711 a-law/mu-law, G.723, G.729ab, • G.726, G.727. T.38 fax relay (9.6 k, 14.4 k) • G.711 transparent fax and bypass

### Call Switching and Services

Virtual interfaces • Regular expression based call routing and number manipulation • Number blocking • Short-dialing • Digit collection, distribution and hunt groups • Transparent line extension • Fallback Routing: Soft fallback to alternative route(s)

### FXS Connectivity

2-wire Loopstart on RJ-11/12 • 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 RJ-11/12 • Programmable impedance, ring detection, tone detection, disconnect supervision • Caller ID detection

### IP services

One 10/100 Ethernet port • DHCP Client • access control lists • Traffic policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion (simultaneous support of multiple VLANs) • IPsec, IKE, AES/DES/3DES encryption (optional)

### Management

Web/HTTP, CLI with local console and remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II

and product MIB • Secure mass provisioning for firmware and unit/subscriber configuration • Built-in diagnostic tools (trace, debug, call generator)

### System

CPU Motorola MPC870 @ 66MHz • Memory 32MB SDRAM/8MB Flash • Power 100-240 VAC (50/60 Hz) • Power dissipation 4-12W, model dependent

### Environment

Temp.: 32-122°F (0-50°C)  
Humidity: Up to 90% (non condensing)

### Compliance

EMC compliance: EN55022 and EN55024 • Safety compliance: EN 60950 • CE compliance • FCC Part 15 Class A • TBR21 (FXS) • RoHS

## Ordering Information

**SN4112/JO/EUI:** SmartNode Dual FXO VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4112/JS/EUI:** SmartNode Dual FXS VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4114/2JS2JO/EUI:** SmartNode 2 FXS & 2 FXO VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4114/JO/EUI:** SmartNode 4 FXO VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4114/JS/EUI:** SmartNode 4 FXS VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4116/4JS2JO/EUI:** SmartNode 4 FXS & 2 FXO VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power

**SN4118/4JS4JO/EUI:** SmartNode 4 FXS & 4 FXO VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power  
**8 FXS VoIP Gateway, 1x10/100Base-T, H.323 and SIP, External UI power**

\*Internal power supplies available on special-order basis. For more information, contact sales@patton.com.

### Options & Accessories

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

**PATTON**<sup>®</sup>  
Let's Connect!<sup>™</sup>

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