



## SmartNode™ 4660

### BRI/FXS/FXO VoIP Gateway-Router

*IP-enable legacy PBX systems while connecting fax separately with both BRI and FXS/FXO interfaces on one box. Combining a VoIP gateway with an IP router, the SmartNode 4660 adds QoS, VPN security, and transcoding, making it the ideal solution for secure and prioritized unified communications.*

#### Both ISDN BRI and FXS/FXO Port Combinations

*Combinations of up to 2–8 BRI, 4–8 FXS, and up to 4 FXO interfaces connect fax lines, answering machines and door-intercoms separately from PBX systems.*

#### Proven Interoperability

*Interoperable with major IP PBX, softswitch, and VoIP service providers.*

#### QoS and Security

*Patton's DownStreamQoS™ with adaptive traffic management and shaping as well as voice-over-VPN with AES/DES strong encryption for secure toll-quality voice communications.*

#### Transparent Telephony Features

*Preserves ISDN features like caller ID and name (CLIP/CLIR), call transfer, hold, waiting, AOC and much more. Handles complex number manipulation for most seamless integration with existing infrastructure.*

#### Fax that Works

*T.38 and SuperG3 Fax enables sending and receiving of faxes (from analog fax or fax machines on VoIP networks).*

#### High-Precision Clock

*Delivers DECT PBX interoperability and reliable fax performance*

#### SmartNode™ Awards

- **2011 Internet Telephony Product of the Year:**  
SmartNode™ 5400/2GS
- **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

The SmartNode™ 4660 provides a unique enterprise solution offering analog and BRI access lines to IP-enable PBX and fax lines, answering machines or door intercoms separately. The Ethernet uplink provides access to any existing modem including cable, ADSL, VDSL, EFM, and fiber. Also, session border controller capabilities include transcoding for up to 12 channels.

Connect to any switch, PBX or data network with 2–8 BRI, 4–8 FXS, up to 4 FXO and 4 Ethernet ports for up to 16 simultaneous calls using SIP, FXS/FXO or BRI signaling. Like every SmartNode™, the SN4660 supports all the industry-standard CODECs, delivering 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) combined with dial-backup and IP-link redundancy for VoIP and data survivability. Provide VoIP-over-VPN security with voice encryption via IPsec with AES/DES strong encryption and automated

keying via Internet Key Exchange (IKE), plus SIP Registrar for presence/reachability.

Advanced router functionality includes least-cost call routing with flexible dialed-number plan support. Additionally, Patton's DownStreamQoS™ delivers the clear advantage of secure, uninterrupted voice-and-data communication.

SmartNode survivability ensures business continuity in the case where your network goes down by combining PSTN fallback with IP-link redundancy. Also, to ensure a smooth transition to VoIP, the SN4660 assists in the number porting process by allowing incoming calls over the PSTN until number porting is completed with the VoIP service provider.

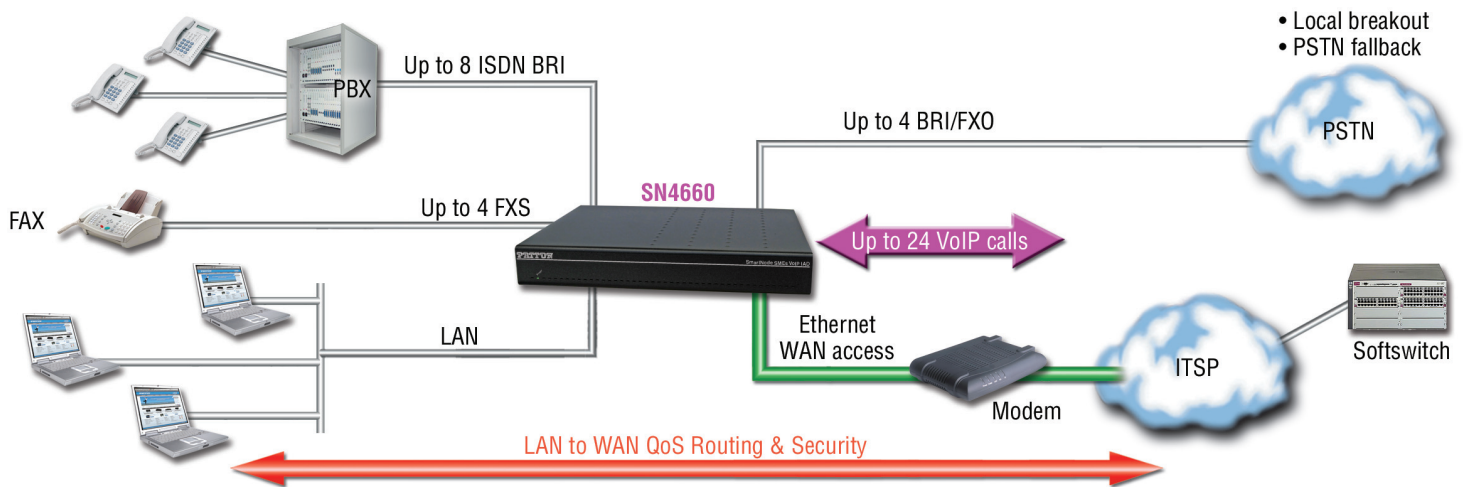
Additional options include Patton's unique high-precision clock enabling first-line IP telephony services in demanding ISDN and DECT environments with reliable FAX and modem performance.

Preserve investment in legacy phone equipment while taking the next steps toward unified communications with the SN4660 Gateway-Router.

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



## Application Diagram—Convert Legacy PBX and FAX to VoIP



## Specifications\*

### Capacity

Up to 24 simultaneous VoIP or T.38 fax calls (depending on the model)

### BRI Voice Connectivity

2/4/8 BRI So ports, RJ-45 • NT/TE configurable per port • Built-in line power on each port (total 4W) • DSS1, Q.921, Q.931. NTT-64 • Point-point and point-multipoint • Optional QSIG support\*

### FXS/FXO Voice Connectivity

4 FXS and FXO ports • 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 ITUV.23/Bell 202 generation • FSK & shuttered dial tone MWI

### 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 • Transcoding for up to 12 channels

### Call Routing and Services

Regular expression call routing and manipulation • number blocking • short-dialing • digit collection, distribution and hunt groups

### LAN/WAN Connectivity

4 x 10/100BaseT Ethernet WAN • Auto-MDI-X • DHCP Client • PPPoE Client (multi-session) • IP Multi-Netting access control lists • DMZ port

### IP Quality of Service

Voice priority • DownStreamQoS™ • traffic management, shaping policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion, 4,096

### Management

Web/HTTP, CLI with local console & remote Telnet access • TFTP configuration & firmware loading • SNMP MIB II and product MIB • Secure auto provisioning for firmware & unit/subscriber configuration • Built-in diagnostic tools (trace, debug, call generator)

### Power & Packaging

Desktop metal chassis

**Dimensions:** 11.0W x 1.5H x 7.0 D in. (28.0W x 3.9H x 18.0D cm)

**Weight:** < 30 oz (850g)

**Internal Power:** 100–240VAC (50/60 Hz)

**Power Consumption** < 15W

### Operating Environment

**Operating Temperature:** 32 to 104° F (0 to 40°C)

**Operating Humidity:** up to 90%, non-condensing

### Compliance

EMC: EN55022 and EN5502 • Safety: EN 60950 • CE • FCC Part 15 Class A; Part 68; CS-03

\* Specifications subject to change without notice.

## Ordering Info

### SN4660 ISDN BRI/FXS VoIP Gateway: Hi-Capacity, External UI power

**SN4660/8BIS16V/EUI:** SmartNode Gateway-Router, 8 BRI, 16 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power

**SN4661/2BIS2JS2JO8V/EUI:** SmartNode Gateway-Router, 2 BRI, 2 FXS, 2 FXO, 8 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/2BIS4JS8V/EUI:** SmartNode Gateway-Router, 2 BRI, 4 FXS, 8 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/4BIS4JS12V/EUI:** SmartNode Gateway-Router, 4 BRI, 4 FXS, 12 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/4BIS4JS4JO12V/EUI:** SmartNode Gateway-Router, 4 BRI, 4 FXS, 4 FXO, 12 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/8BIS8V/EUI:** SmartNode Gateway-Router, 8 BRI, 8 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/8BIS16V/EUI:** SmartNode Gateway-Router, 8 BRI, 16 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

**SN4661/8BIS4JS24V/EUI:** SmartNode Gateway-Router, 8 BRI, 4 FXS, 24 VoIP calls, 4 LAN/WAN Ethernet Ports, External 100–240 AC power, high-precision clock

### Options & Accessories

For G.SHDSL WAN interface, see the SmartNode 4670

Note: For complete ordering list, contact [sales@patton.com](mailto:sales@patton.com)

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Let's Connect!™

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SN4660-DS2

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