

FXS/FXO VoIP Media Gateway Router

SmartNode 4520 Series

The SmartNode 4520 VoIP Gateway Router combines IP routing, VPN/Security, and Quality of Service for up to 8 transparent voice, fax, and data over any IP or PSTN network. Leverage low-cost packet-voice and IP services for complete branch office voice and data connectivity.



Connect with confidence using the SmartNode 4520 Series Router. Integrating a complete enterprise router with local PSTN and remote packet-voice, the SN4520 supports eight simultaneous calls for a new standard in toll-bypass, remote/branch office connectivity, and enhanced carrier services.

Perfect for the remote office, branch office, or PBX/switch extension, the SmartNode 4520 integrates all your voice, fax, and LAN traffic for seamless and secure networking.

With its FXS analog ports the SN4520 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 service. ClearConnect adaptive network monitoring ensures your call always gets connected. If the VoIP link goes down or becomes congested, the SN4520 will switch over to the PSTN and guarantee your call each time.

With dual 10/100 Ethernet ports, the SN4520 provides guaranteed Quality of Service while passing LAN traffic at wire-speed. Voice traffic is prioritized while LAN/IP traffic shaping permits efficient access to the Internet and corporate networks. As a complete enterprise router, the SN4520 supports DHCP, NAT, Firewall/ACL, and PPPoE clients. While optional IPSEC VPN and VLAN features tunnel data and AES/3DES ensures secure voice over the public network.

FEATURES & BENEFITS

Up to 8 FXS ports connect to your standard telephone or PBX. 2 or 4 FXO ports allow local PSTN connections. Programmable call routing switches between local or remote connections.

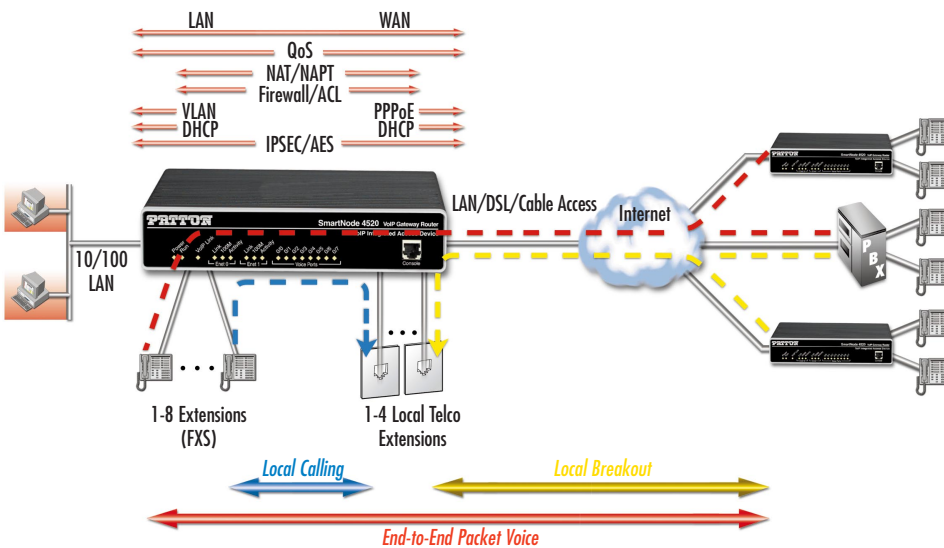
QoS guaranteed voice and data ensures voice traffic gets priority without shutting down your Ethernet LAN.

IPSEC VPN, Encryption, & VLAN — Connect your telephone for IP access and secure your voice with optional IPSEC. Choose DES/3DES or AES for encryption and IKE/manual key negotiation. VLAN tagging/stripping allows interfacing into your existing network today.

ClearConnect PSTN Failover Protection — Link monitoring ensures your call will always go through. Automatic PSTN cut-through if the IP link is down or congested.

Full ToIP™ Call Switching — Enhanced circuit-switched call routing allows user programmable & adaptive call handling based on hunt groups, caller/called ID, and time of day.

Remote Office/Branch Office Voice Extension and Access



ORDERING INFORMATION

SN4522/JS/EUI: 2 Port FXS VoIP Gateway Router, 100–240 VAC external power supply (PS)

SN4524/JS/EUI: 4 Port FXS VoIP Gateway Router

SN4526/JS/EUI: 6 Port FXS VoIP Gateway Router

SN4528/JS/EUI: 8 Port FXS VoIP Gateway Router

SN4524/2JS2J0/EUI: 2 Port FXS, 2 Port FXO Gate-way Router

SN4528/4JS4J0/EUI: 4 Port FXS, 4 Port FXO Gate-way Router

Options & Accessories

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

SPECIFICATIONS

Voice Connectivity: 2-wire loop-start, RJ-11/12 • short haul loop 1.1 km @3REN • EuroPOTS (ETSI EG201 188) • programmable AC impedance, feeding, & ring voltage; on-hook voltage 29VDC • Caller-ID FSK and ITU V.23/Bell 202 generation

Connectivity: 2 10/100 full duplex/autosensing Ethernet RJ-45

Voice Processing (signaling dependent): Voice codes (G.711 A-Law/μ-Law (64kbps); G.726 (ADPCM 40, 32, 24, 16 kbps); G.723.1 (5.3 or 6.3 kbps); G.729ab (8kbps); transparent pass through) • G.168 echo cancellation • 8 parallel voice connections • DTMF detection & generation • carrier tone detection & generation • silence suppression & comfort noise • configurable dejitter buffer • configurable tones (dial, ringing, busy) • configurable transmit packet length • RTP/RTCP (RFC 1889)

Fax & Modem Support: G.711 transparent fax • Fax over IP (FoIP) • T.38 fax relay (9.6 k, 14.4 k)

Voice Signaling: H.323v4 (RAS, H.225, H.245; fast-connect, early H.245; gatekeeper autodiscovery; alias registration; overlap sending; empty capability set (call transfer, hold); H.323v1 call transfer, hold) • SIPv2

Voice Routing—Session Router: Local switching; interface huntgroups • routing criteria (interface;

calling/called party number; time of day, day of week, date; ISDN bearer capability) • number manipulation functions (replace numbers; add/remove digits; multiple remote gateways; PLAR)

IP Services: IPv4 router; RIPv1, v2 (RFC 1058 & 2453) • programmable static routes • ICMP redirect (RFC 792); packet fragmentation • DiffServe/ToS set or queue per header bits • packet policing discards excess traffic • 802.1p/Q VLAN support with 4096 IDs • IPSEC AH & ESP modes • Manual Key; IKE optional

• AES/DES/3DES encryption
Management: Industry standard CLI with local console (CRJ-45, RS-232) & remote Telnet access • TFTP configuration & firmware loading • SNMP v1 agent (MIB II & private MIB) • built-in diagnostic tools (trace, debug) • HTTP GUI

Environment: Temp.: 32–104°F (0–40°C) • Humidity: up to 90%, non-condensing

Power: 100–240 VAC (50/60 Hz) • Power dissipation: 4W

Compliance: EMC compliance: EN55022 & EN55024 • Safety compliance: EN 50950 • CE compliance • FCC Part 15 Class A