# Analog VoIP IAD

## SmartNode<sup>™</sup> Model 4830 DSL Series



Analog VoIP IAD with ADSL2+ or G.SHDSL interface. The SmartNode<sup>™</sup> 4830 DSL Series connects up to 8 phone lines, VoIP, and Internet/VPN access across the integrated broadband WAN interface. Offering bundled voice, data, and VPN services, the SmartNode IAD delivers best-in-class VoIP quality for lowest cost networking.

#### Integrated DSL Uplink

Built in ADSL for up to 24 Mbps. Four-wire G.SHDSL option also available for up to 11.4 Mbps.

#### Full VoIP Protocol Support

SIPv2, H.323v4, T.38 & Fax Bypass, G.723, G.729, G.726, G.711, echo cancellation, silence compression, comfort noise, DTMF relay.

#### FXS, FXO, or Combinations

Up to 8 FXS ports connect to your standard telephone or PBX, 2 or 4 FXO ports allow local PSTN connections. Programmable call routing and switching.

#### Access & Network Routing

Connected to any broadband or access provider. IPv4, RIPv2, ICMP, NAT/PAT, Firewall, DHCP, DynDNS, IPsec VPN.\*

#### QoS Guaranteed Voice & Data

Quality of Service ensures voice traffic gets priority without shutting down your Ethernet LAN.

#### Management & Provisioning

Web-based management, SNMP, command line interface, and auto-provisioning for automated configuration & software upgrades.

#### Why SmartNode?

- Patton Quality
- Made in the USA
- Unrivaled Customer Support
- FREE Tech Support and Upgrades

he SmartNode<sup>™</sup> 4830 DSL Series combines a toll-quality analog VoIP gateway with DSL connectivity—without the need for a separate DSL modem. This all-in-one gateway also includes IGMP v2/v3 proxy function-ality to support video delivery services. This is triple-play at your fingertips!

The SN4830 DSL Series offers models with combinations of 2 to 8 FXS ports, and 2 to 4 FXO ports. The 10/100Base-T LAN port supports Auto-MDIX and VLAN. The integrated DSL port provides direct access to broadband networks. Like every SmartNode, the 4830 DSL series supports industry standard VoIP signaling protocols SIP, H.323, T.38 Fax-Relay, plus fax and modem-bypass and is interoperable with leading softswitches and VoIP services.

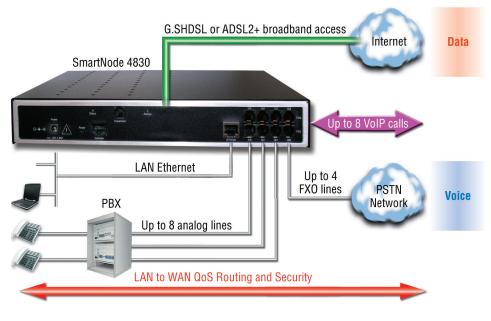


Quality of Service (QoS) is ensured by using advanced voice prioritization and traffic management. DownStreamQoS<sup>™</sup> ensures voice without interruptions even over best-effort internet connections. Packet labeling according to 802.1p, ToS, and DiffServ enable integration into managed QoS networks.

The SN4830 is the solution for service providers and network integrators looking for seamless integration of analog phones and PBXs into converged VoIP-data networks. It ensures easy setup, continuous trouble-free operation, and cost-effective deployment. The support of the leading VoIP signaling protocols ensures interoperability with third-party equipment and protects your investments for the future.

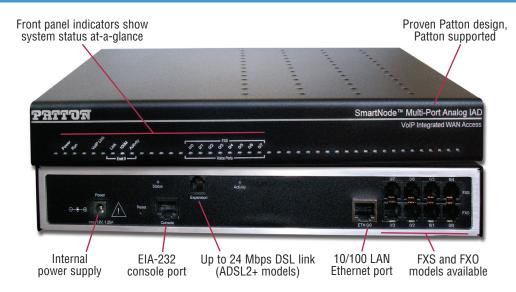
Visit <u>www.patton.com/smartnode</u> for more information.

## Typical Application: Network Integration





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### Specifications\*\*

#### Voice Signaling

SIPv2 • H.323v4 • SIP call transfer, redirect • Overlap or en-bloc dialing • DTMF inband, out-of-band • Configurable tones

#### **Broadband Access**

ADSL2+ ITU-T G.992.5, Annex A/M, B (up to 24 Mbps) • 4-wire G.SHDSL ITU-T G.991.2, Annex A, B, F, G (Up to 11.4 Mbps) • PPPoE • 8 PVCs, each UBR, CBR, or VBR-rt selectable • I.610 OAM F4/F5 support • G.994.1 (G.hs)

#### Analog Connectivity

**External UI power** 

2-wire Loop start RJ-11/12 •
Short haul loop, 1.1 km@3REN
EuroPOTS (ETSI EG201 188)
Programmable AC impedance, feeding, and ring voltage
On hook voltage 29V DC •

### Model Information

Caller-ID Type 1/2 FSK and ITU V.23/Bell 202 generation

#### **IP** Connectivity

One 10/100 Base-T Ethernet port • Auto-MDIX • DHCP Client/Server • PPPoE Client (multi-session) • IP Multi-Netting, VLAN, Secondary IP • IPv4, RIPv2, ICMP • ACL Firewall • DNS, DynDNS • SNTP Client • Optional IPsec VPN (DES, 3DES, AES)

#### Voice Processing

G.711µ-law/A-law • G.723.1 (5.3 or 6.4 kbps) • G.729ab (8 kbps) • G.726 (16, 24, 32, 40 kbps ADPCM) • G.168 Echo Cancellation (25ms) • 8 parallel analog voice connections • DTMF detection and generation • Silence Suppression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

#### Fax and Modem Support G.711 transparent Fax • T.30 • T.38 Fax Relay (9.6k, 14.4k)

#### Call Routing & Services

Regular Expression number matching • Regular expression number manipulation • Least Cost Routing • Number Blocking • Short-Dialing • Digit Collection • Distribution- and Hunt-groups

#### Quality of Service (QoS)

Voice priority, DownStreamQoS • Traffic Shaping/Policing • IEEE 802.1p/Q • 4096 VLANs (Tag insertion/deletion) • TOS, DiffServ Labeling

#### Management

Web-based GUI • Fully Documented CLI • Telnet and HTTP access • TFTP configuration up- and download • TFTP firmware upgrade • SNMPv1 agent (MIB II and private MIB) • Built-in diagnostic tools • Secure Auto-Provisioning

#### Power & Packaging

Desktop Metal chassis Dimensions:  $11.5 \times 1.85 \times 6.2$  in.  $(29.2 \times 4.7 \times 15.7 \text{ cm})$ Weight : 1.85 lbs. (840 g) Power Consumption: 4 W Operating Temp.:  $32-104^{\circ}$  F  $(0-40^{\circ}$ C) Operating Humidity: Up to 90%, non-condensing

#### Compliance

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

## SmartNode™ FXS/FXO VoIP Gateway Routers, Integrated ADSL2+ Annex A/M/B WAN, External UI power

SN4832/JSA/EUI: 2-FXS VoIP Gateway Router, ADSL WAN SN4834/JSA/EUI: 4-FXS VoIP Gateway Router, ADSL WAN SN4838/JSA/EUI: 8-FXS VoIP Gateway Router, ADSL WAN SN4838/4JS4JOA/EUI: 4-FXS, 4-FXO VoIP Gateway Router, ADSL WAN SN4834/2JS2JOA/EUI: 2-FXS, 2-FXO VoIP Gateway Router, ADSL WAN

\* IPsec VPN requires a separate license.



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SmartNode™ FXS/FXO VoIP Gateway Routers, Integrated G.SHDSL WAN,

SN4832/JS2GS/EUI: 2-FXS VoIP Gateway Router, G.SHDSL WAN

SN4834/JS2GS/EUI: 4-FXS VoIP Gateway Router, G.SHDSL WAN

SN4836/JS2GS/EUI: 6-FXS VoIP Gateway Router, G.SHDSL WAN

SN4838/JS2GS/EUI: 8-FXS VoIP Gateway Router, G.SHDSL WAN