SMARTNODE 2300 SERIES

Patton's SmartNode 2300 Modular VoIP Access Router creates a flexible enterprise solution for easy integration of voice and data. Scalable, intelligent, and multi-service, the SmartNode 2300 supports up to 60 simultaneous calls and is equipped with a Sync. Serial router with QoS, NAT, and Firewall.

Modular VoIP Access Router

Patton SmartNode 2300

The SmartNode 2300 Modular VoIP Access Router is a single flexible platform for network data and Voice-over-IP applications. Ideal for the branch office or the small to medium enterprise, the SmartNode 2300 is performance-tuned for packet and voice. Equipped with dual Ethernet ports, a serial V.35/X.21 port, and three voice interface slots, the SmartNode 2300 scales up to 60 simultaneous calls in a 1U chassis.

The SmartNode 2300 connects your LAN to the WAN using PPP or Frame Relay (RFC-1490) eliminating the need for and cost of an extra router. With dual Ethernet ports and built-in QoS, NAT, DHCP, PPPoE, and ACL/Firewall, the SmartNode 2300 provides complete LAN network access control.

With Patton's Telephony-over-IP (ToIP) programmable circuit-switching the SmartNode links any standard BRI, T1/E1 PRI, or FXS connection to the IP network. Supporting multiple codecs and T.38/Modem bypass, the SmartNode seamlessly converges voice, data, and fax over IP.

The SmartNode delivers IP network access with the clarity of toll-quality voice for a complete LAN, WAN, and Gateway solution. For more information, visit us at www.patton.com.

Up to 60 Simultaneous Calls

Supports up to 60 simultaenous calls from any combination of voice intefaces including T1/E1 PRI, BRI, and FXS.

Compatible CODECs

Connect to any gateway with any one of our standard codecs (including G.711 and G.726). For low bandwidth requirements, use G.723.1 and G.729ab vocoders.

Complete Service Transparency

Using ISoIP™ and ToIP™ technology, calls are connected with voice, data, and supplementary services delivered transparently end-to-end.

T1/E1, BRI, & FXS Voice Interface Cards

Use any combination of voice interfaces for connection to any telephone, switch, or service provider. Scale your connections by simply adding new interfaces.
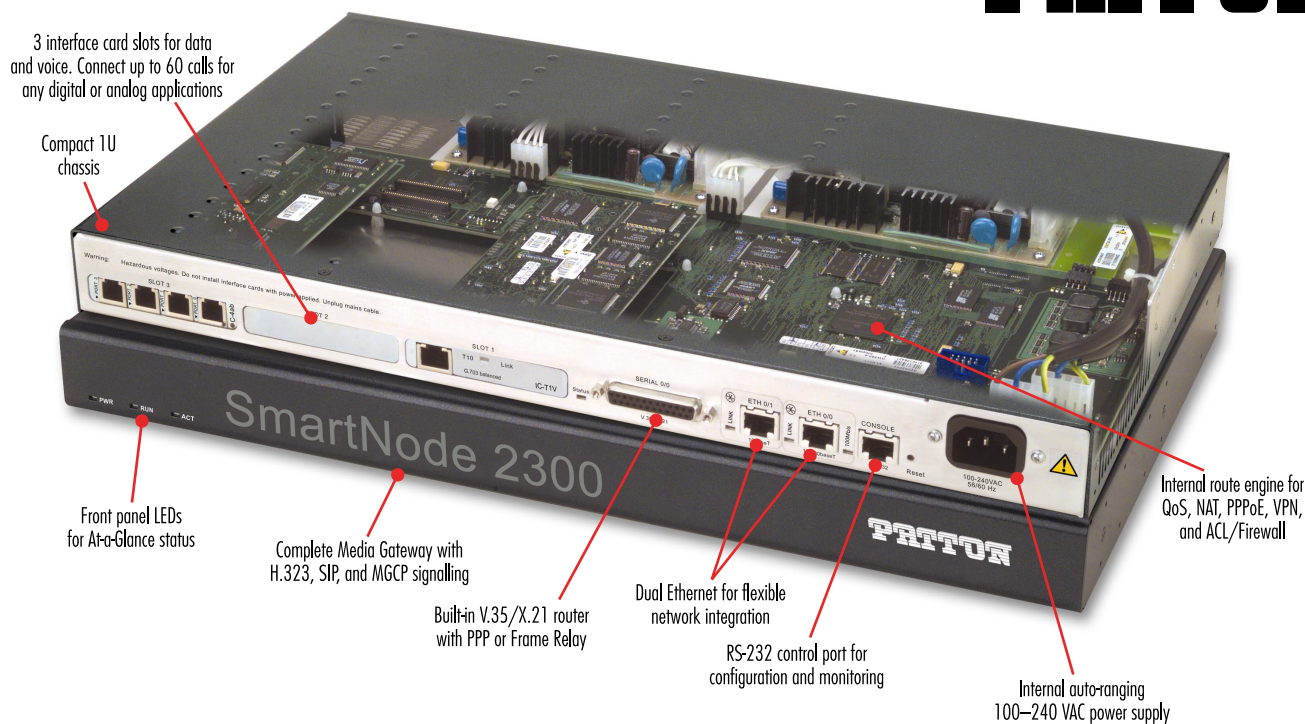
H.323v3 and H.323+ VoIP

Connect to any SmartNode or VoIP capable device with universal call control signalling. Use advanced features including H.245 Fast Connect, Early Start, Annex M3, ECS support, and RAS.

V.35/X.21 Router with Dual Ethernet

Connect your LAN to any broadband access network with its built-in sync. serial router. Use NAT, DHCP, and ACLs while guaranteeing voice priority and service quality.

PATTON

- 3 interface card slots for data and voice. Connect up to 60 calls for any digital or analog applications
- Compact 1U chassis
- Front panel LEDs for At-a-Glance status
- Complete Media Gateway with H.323, SIP, and MGCP signalling
- Built-in V.35/X.21 router with PPP or Frame Relay
- Dual Ethernet for flexible network integration
- RS-232 control port for configuration and monitoring
- Internal auto-ranging 100–240 VAC power supply
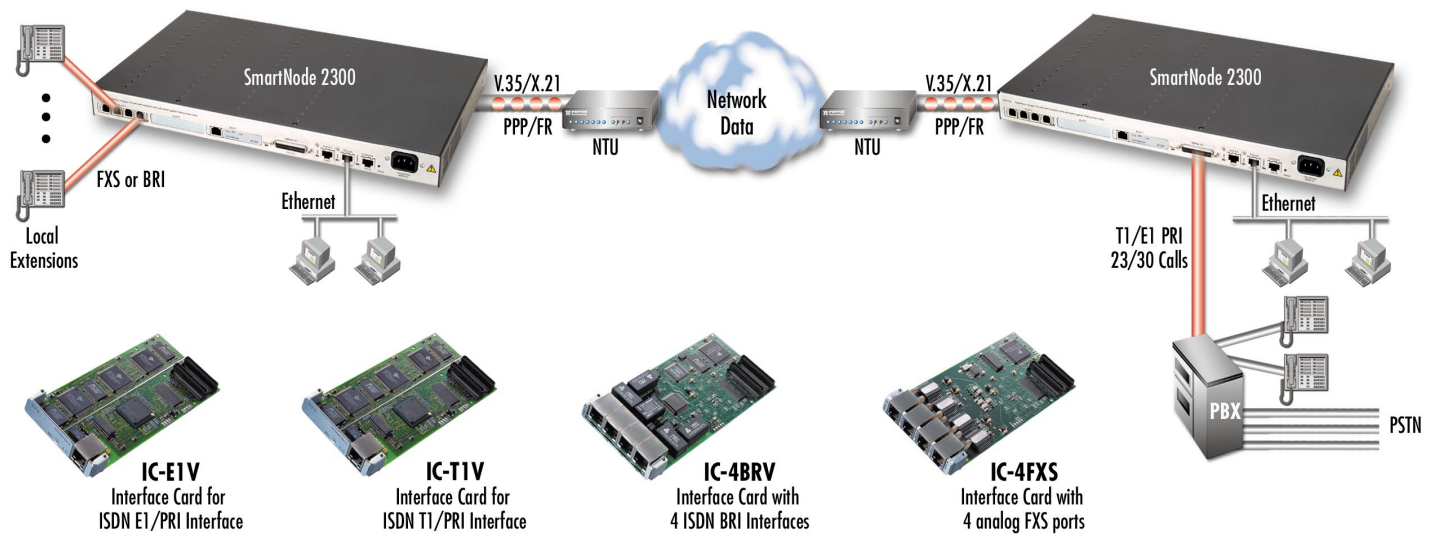- Internal route engine for QoS, NAT, PPPoE, VPN, and ACL/Firewall

Application—Office IP & Voice Access

The SmartNode 2300 Modular VoIP Access Router is an intelligent multi-service access device providing both routed LAN services and Voice-Over capabilities.

With its internal router and V.35/X.21 port, remote or local sites can access public IP services or private data VPNs without the added cost of a router.

Adding Voice-Over capabilities are a snap using any combination of field-installable voice and data modules. Now any site can connect VoIP to any phone with BRI, T1/E1 PRI, or FXS.

IC-E1V
Interface Card for
ISDN E1/PRI Interface

IC-T1V
Interface Card for
ISDN T1/PRI Interface

IC-4BRV
Interface Card with
4 ISDN BRI Interfaces

IC-4FXS
Interface Card with
4 analog FXS ports

Specifications

Data Connectivity
- 1 10 and 1 10/100Base-T Ethernet, RJ-45
- V.35, X.21 DTE
- IP unnumbered
- Packet fragmentation
- Frame Relay (Q.922, FRF.12)
- RFC 1490 IP over Frame Relay
- LMI (Q.933D, ANSI 617D, Gang of Four)

Voice Signalling
- Euro ISDN EDSS-1/ETSI BRI/NET3
  - ETS 300 012-1 (ITU-T I.430)
  - ETS 300 402-1 (ITU-T Q.921)
  - ETS 300 403-1/2 (ITU-T Q.931)
  - ETS 300 102-1 (ITU-T Q.931)
- Q-SIG (PSS-1)
  - ECMA-143
  - ETSI and ISO/ECMA channel numbering
- SIP and MGCP
- H.323v3
  - 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
- ISDN over IP (ISoIP)
  - H.323 GW and GK compatible
  - H.323 Annex M3
  - ISDN/Q-SIG feature tunnelling
  - ISDN speech, audio and data (Fax Gr 4, UDI 64, RDI 64)
  - ISDN supplementary services

Voice Routing—Session Router™
- Local switching
- Interface huntgroups
- ISDN broadcast message routing
- 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 Routing
- IPv4 router
- RIPv1, v2 (RFC 1058 and 2453)
- Programmable static routes
- ICMP redirect (RFC 792)
- Packet fragmentation
- Static Firewall
  - NAT/PAT/NAPT (RFC 1631)
  - Access control lists

IP Quality of Services
- WFQ/Fixed Rate/Priority Queuing
- Combination of QoS schemes with configurable burst
- DiffServe/ToS set or queue per header bits
- Pocket Policing dicards excess traffic
- 802.1p VLAN tagging

Management
- Industry standard CLI
- Local console (RS-232, RJ-45) and remote

- Telnet access
- TFTP configuration down- and upload
- TFTP firmware download
- SNMP v1 agent (MIB II and private MIB)
- Built-in diagnostic tools
- Java™ Applet
- HPOV Integration with NNM

Operating Environment
- Operating temperature: 0—40ºC
- Operating humidity: 5—80% (non condensing)

System
- CPU Motorola MPC860 at 50 MHz Memory 16MB SDRAM/4 MB Flash
- Power: 100—240 VAC (50/60 Hz)
- Power dissipation 30W (fully loaded)

Compliance
- EMC compliance: EN55022 and EN55024
- Safety compliance: EN 50950
- CE compliance
- FCC Part 15 Class A

Model Information

SN2300/0V/UI Modular VoIP Access Router with internal 100—240 VAC power supply

SNSW-IAF-3 IP Advanced Feature Set (QSIG,QoS, IP Classification)