

# Enterprise Session Border Controller (with FXS)

Model 5541

PATTON®

Power Run VoIP Link Link 100M Activity Link 100M Activity  
Enet 0 Enet 1

*The SmartNode 5541 Series of Enterprise Session Border Controllers (with analog interfaces) support up to 8 telephone connections integrating legacy equipment into a UCC Environment. High quality voice and reliable fax over any IP network. All-IP does not end when analog terminals have to be integrated. Security and quality guaranteed.*

## Up to 8 FXS interfaces

2, 4 or 8 FXS ports. Up to 8 G.722/G.711 or T.38 calls simultaneously.

Includes SIP TLS/SRTP.

## Advanced Local Call Switching

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

## Network Monitoring

Embedded Packet Smart Agent for network monitoring and assessment 24x7.

## Auto-Provisioning

Secure zero-touch provisioning (HTTPS) for ease of use.

## Proprietary OS

Utilizes proprietary Trinity™ software for enhanced security.

## Easy Management & Provisioning

WebWizard, HTTPS zero touch provisioning, SNMP, command line interface.

Automated mass provisioning with dual software image for efficient large-scale deployments.

## Full VoIP protocol support

SIPv2, SIPv2 over TLS, ISDN, T.38, G.722 HD voice, RTP Security with SRTP, fax and modem bypass, DTMF relay.

## Outstanding Interoperability

Interoperable for voice and T.38 fax with leading SIP service providers, softswitch vendors, and major IP-PBX manufacturers.

## Why SmartNode?

- Patton Quality
- Swiss Engineered—Made in the USA
- Unrivaled Customer Support
- FREE Software Upgrades

Connect with confidence using the SmartNode 5541 Series eSBC with an integrated enterprise router to the local PSTN and/or the SIP Trunk service. The SN5541 supports 8 simultaneous calls for a new standard in toll-bypass, remote/branch office connectivity, and enhanced All-IP carrier services.

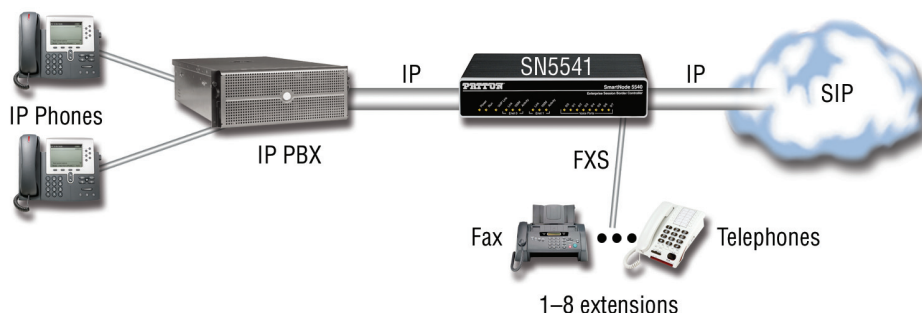
The SN5541 acts as VoIP gateway, eSBC, access router and QoS CPE all in one device. It can also undertake network assessment and monitoring at the customer premise utilizing the PacketSmart™ agent to prevent, reduce, and resolve network and voice quality problems.

## Network Integration

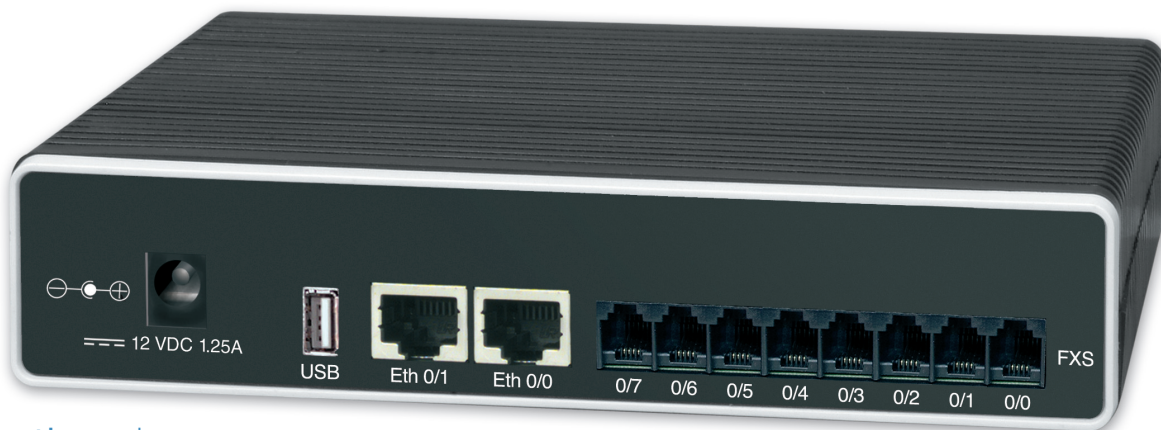
Whether used as an Enterprise Session Border Controller, as a VoIP gateway or IP router, the SmartNode 5541 provides excellent VoIP, IP QoS, and security features for seamless network integration.

Thanks to the built-in FXS ports, it resolves technology evolution related problems, either by integrating old, non-replaceable telephones into a UCC environment, or for good old fax devices to be migrated to the next-generation network infrastructure.

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



# SmartNode™ Model 5541 Enterprise Border Controller



## Specifications\*

### Call Capacity

Up to 8 simultaneous  
G.722/G.711 or T.38 fax calls

### Voice Signaling

- SIPv2 & SIPv2 over TLS
- SIP call transfer, redirect
- Overlap or en-bloc dialing
- DTMF in-band, out-of-band
- Configurable tones Call Routing & Services
- Regular expression number matching
- Regular expression number manipulation
- Least Cost Routing
- Number blocking
- Short-Dialing
- Digit collection
- Distribution-Groups and Hunt-Groups

### FXS Connectivity

- 2 FXS ports, RJ-11/12
- 2-wire Loopstart
- EuroPOTS (ETSI EG201188)
- Programmable AC impedance, feeding, ring and onhook voltage
- Caller-ID FSK and ITU V.23/Bell 202 generation
- Long Reach FXS—6.5 km @ 3REN load
- Secondary Surge Protection (optional)

### Voice Processing

- G.722
- G.711m/A-law
- G.723.1 (6.4 kbps)
- G.729, 729a, 729ab (8 kbps)
- G.726 (16, 24, 32, 40 Kbps)
- G.168-2004 echo cancellation (128 ms)
- Up to 4 simultaneous low-bandwidth voice or T.38 fax calls
- Up to 8 HD calls with SRTP
- Up to 256 SIP to SIP calls\*\*\*
- Up to 4 SIP transcoded calls\*\*
- Silence suppression and comfort noise
- Adaptive and configurable dejitter buffer
- Configurable RTP packet length

### Quality of Service

- PacketSmart™ Network Assessment & Monitoring\*\*
- Voice priority, DownStreamQoS™
- Traffic Management, shaping policing
- IEEE 802.1p, IEEE 802.1Q, 4096 VLANs (Tag insertion/deletion), TOS, DiffServ Labeling

### Connectivity

- Two 10/100/1000Base-T Ethernet ports
- 1 USB port
- Auto-MDIX
- DHCP Client
- PPPoE Client (multi-session)
- IP Multi-Netting, VLAN, Secondary IP
- IPv4, Basic IPv6
- ICMP
- Dynamic and static NAT and NAPT
- ACL, Stateful Firewall
- DNS, DynDNS
- DHCP Server
- SNTP Client

### Management

- Web/HTTPs, CLI with Telnet and SSH access
- WebWizard
- Fully Documented CLI
- Telnet and HTTPs access
- TFTP, HTTP, HTTPS configuration up- and download
- TFTP, HTTP, HTTPS firmware upgrade (dual-firmware image)
- SNMPv3 agent
- Separate config domain (LAN side config and WAN side config)
- MIB II and private MIB

- Built-in diagnostic tools
- Secure Auto-Provisioning with built in root CA

### Power Consumption

< 10W

### Packaging

Plastic chassis

### Dimensions

8.2W x 1.3H x 6.5D in.  
(20.8W x 3.4H x 16.5D cm)

### Weight

<450g (15.9 oz)

### Environment

- Operating temperature: 32 to 104°F (0 to 40°C)
- Operating humidity: up to 90%, non-condensing

### Safety & Compliance

- EMC compliance: EN55022 and EN55024
- Safety compliance: EN 60950
- CE compliance
- FCC Part 15 Class A
- TBR21 (FXS)
- RoHS
- ITU-T K.21 protection (FXS ports)\*\*

## Ordering Info

Obtain ordering info for this product by using the QR code at right or by contacting:

- web: [http://www.patton.com/products/product\\_detail.asp?id=541&tab=Ordering](http://www.patton.com/products/product_detail.asp?id=541&tab=Ordering)
- email: [sales@patton.com](mailto:sales@patton.com)
- tel: +1 301.975.1000



Specifications subject to change without notice | \* Depending on model | \*\* Licensed Feature at additional charge | \*\*\* Supports up to 256 SIP-to-SIP sessions under ideal conditions. Transcoding, debugging, and/or IP routing reduce processing capacity.



**Patton Electronics Co.**  
7622 Rickenbacker Drive  
Gaithersburg, Maryland 20879, USA  
Phone +1 301 975 1000  
Fax +1 301 869 9293  
E-mail [sales@patton.com](mailto:sales@patton.com)  
Web [www.patton.com](http://www.patton.com)

**Patton-Inalp Networks AG**  
Meriedweg 7  
CH-3172 Niederwangen, Switzerland  
Phone +41 (31) 985 25 25  
Fax +41 (31) 985 25 26  
E-mail [sales@inalp.com](mailto:sales@inalp.com)  
Web [www.inalp.com](http://www.inalp.com)

**Patton Hungary Zrt**  
Gábor Dénes utca 4., Infopark Building C  
Budapest H-1117, Hungary  
Phone +36 1 439 4840  
Fax +36 1 439 4844  
E-mail [ce@patton.com](mailto:ce@patton.com)  
Web [www.patton.com](http://www.patton.com)

07MSN5541-DS1

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