



PATTON SN500 SmartNode eSBC Very-Low-Cost Session Border Controller Owner's Manual

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SmartNode™ eSBC
Model SN500



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SN500 SmartNode eSBC Very-Low-Cost Session Border Controller

The SmartNode SN500 from Patton is the first and only eSBC designed for small/home offices and small to medium enterprises. Supporting 4 to 30 concurrent SIP sessions, this entry-level eSBC provides SIP demarcation, network protection, and call-quality assurance for All-IP business communications. The SN500 is ideal for implementing unified communications, SIP trunking, and cloud/hosted PBX services.

SLA Monitoring

Call Quality monitoring ensures service level agreement (SLA) is met at the customer

premise. Call data recording (CDR) includes voice-quality information, call duration, codec, and more. Accessible by Web and API (OSS/BSS integration).

VoIP Security

Network separation with SIP back-2-back user agent, DoS prevention, trust SIP peer, optional signaling encryption (SIP-TLS), intelligent access control list (ACL).

SIP Normalization & Interop

SIP-to-SIP Interworking, normalizes otherwise incompatible vendor-specific SIP implementations. Service demarcation point provides separation between LAN and WAN.

SIP Endpoint Management

Endpoint provisioning and operating tools include discovery and remote-access of SIP endpoints, maintaining VoIP service.

Easy Management & Provisioning

Patton Cloud network edge orchestration.

Automated mass-provisioning with HTTPS delivers secure, zero-touch provisioning.

Patton's cloud-based Web Wizard configuration tool combined with software-image campaign-management ensures efficient large-scale deployments.

Proprietary Software

Proprietary Trinity™ operating system offers added security.

Designed to resolve the complex security, interoperability, and service-quality issues service providers and enterprises face, Patton's very-low-cost SmartNode™ SN500 eSBC is perfect for delivering high-quality SIP trunk, hosted PBX and UC services for SoHos and SMEs. Service providers do not typically own the transport network, so they cannot control the quality of service at the customer premise. That's where the eSBC comes in:

The SN500 is operated, managed, and administrated by the Patton Cloud, which provides proactive notification of performance issues in the customer network that may impair call quality. Automated alerts allow pre-emptive corrective actions that

reduce service downtime and increase customer satisfaction.

The Application

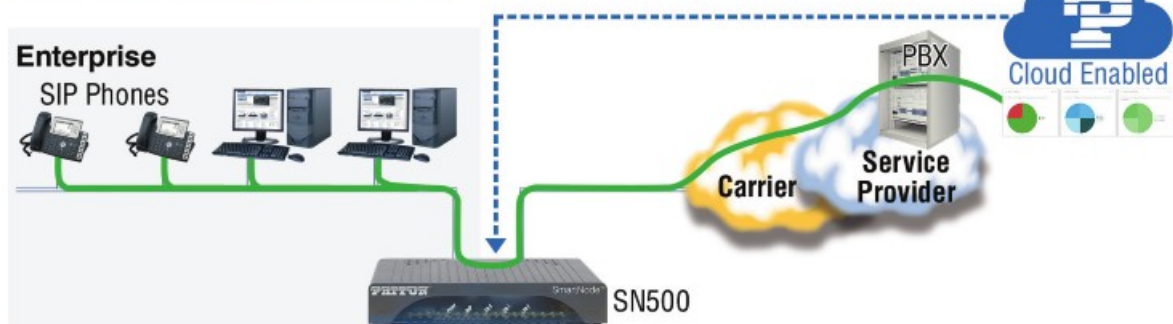
The SN500 is ideal for such applications as SIP trunking and unified communications as a service (UCaaS)—with a cloud/hosted PBX.

Installed at the SoHo or SME customer premise, the SN500 provides a clear network separation point (demarc) between the subscriber LAN and the service provider WAN.

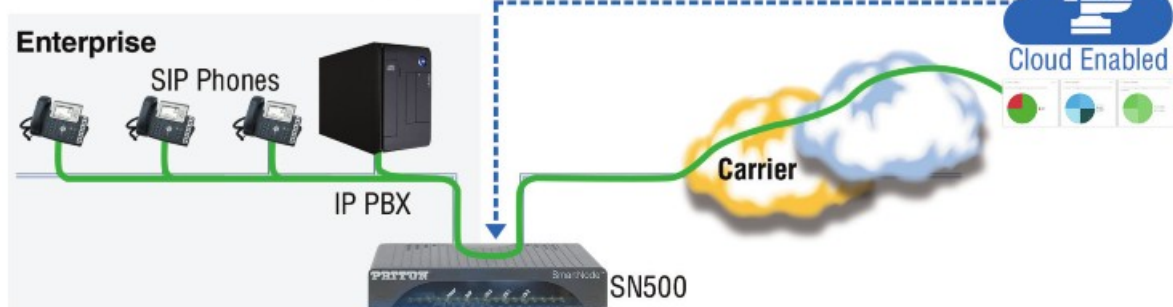
In conjunction with the Patton Cloud, the eSBC monitors SIP traffic and call quality, and triggers an e-mail or SMS notification whenever call-quality drops. Remote SIP endpoints (phones, computer terminals, etc.) can be easily provisioned,

monitored and managed using the Patton Cloud. Visit www.patton.com/smartnode for more information.

SmartNode SN500 Unified Communications as a Service (UCaaS) Application



SmartNode SN500 SIP Trunking Application



Front



Rear

Specifications

Voice Signaling

- SIPv2 over UDP/TCP or TLS*
- SIP call transfer, redirect
- P-Header, X-header Support
- Overlap or en-bloc dialing
- DTMF in-band, out-of-band

Call Routing & Services

- SIP Registrar
- Regular expression number matching & manipulation
- Least Cost Routing
- Call load distribution
- Number blocking
- Short-Dialing
- Digit collection

- Distribution-Groups and Hunt-Groups
- Seamless call failover
- Detection of RTP loss

Security

- Network separation
- SIP back to back UA
- SIP – TLS*
- SIP inbound & outbound authentication
- DoS detection & prevention
- Intelligent ACL
- SIP Trusted peer
- Built-in Root CAs

Call Capacity

Up to 30** SIP to SIP calls

RTP & Codec Capabilities

- Codec negotiation
- RTCP Reporting & Monitoring
- 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)
- Transparent Clear channel

RFC 4040)

- iLBC 13.33k
- AMR-NB (4.75, 5.15, 5.9, 6.7, 7.4, 7.95, 10.2, 12.2 kbps)

Quality of Service

- Patton Cloud based, Advanced CDRs and Call Quality Metrics**
- Voice priority
- Up & DownStreamQoS™
- Traffic Management, shaping policing
- IEEE 802.1p, IEEE 802.1Q, 4096 VLANs (Taginsertion/deletion), TOS, DiffServ Labeling

Management

- Patton Cloud Orchestrated
- Dynamic resource licensing model (leased / floated)

- CLI local access with Telnet and SSH access
- Cloud based WebWizard
- Fully Documented CLI
- Secure Zero Touch Provisioning
- Patton Cloud based, secureConfiguration & Firmware upand download
- Secure Auto-Provisioning with built-in root CA

Connectivity

- 2 x Ethernet 10/100/1000Base-T
- Auto MDI-X

IP Networking

- DHCP Client & Server
- IP Routing, DMZ
- RIPv1, GRE, BGP, VRRP
- VLAN, Secondary IP
- Switch- & Bridge group Support
- Policy, Packet and packet length Based Routing
- NAT & NATPT Support
- DNS, NTP,
- PPPoE Client

Power Consumption

< 10W

Packaging

- Plastic chassis
- Desktop or wall mountable

Dimensions

4.7 x 1.52 x 5.00 in.
(106 x 390 x 127 mm)

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
- RoHS

Specifications subject to change without notice. * Licenses Feature (additional cost) | ** Performance numbers are subject to change Patton Cloud based features & services depend on Cloud Service plans which are to be purchased separately

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
 Web 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 we@patton.com
 Web www.patton.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
 Web www.patton.com
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Documents / Resources

	<p>PATTON SN500 SmartNode eSBC Very-Low-Cost Session Border Controller [pdf] Owner's Manual</p> <p>SN500 SmartNode eSBC Very-Low-Cost Session Border Controller, SN500, SmartNode eSBC Very-Low-Cost Session Border Controller, Session Border Controller, Border Controller, Controller</p>
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