SmartNode™ Enterprise Session Border Controller/IAD

Broadband Access & PRI interfaces | Model 5570

The SmartNode 5570 is a cost-effective eSBC with integrated Broadband access and 1 or 2 PRI ports supporting a high level of VoIP and network security. It is capable of doing up to 200 SIP-to-SIP calls*** whereof max. 16 can be transcoded**. Built-in QoS functionalities and support of G.722 high definition codec ensure excellent VoIP call quality.

From 15 to 30 VoIP calls
1 or 2 ISDN E1/T1 PRI ports. Up to 30 simultaneous G.722, T.38 or G.711 ISDN to VoIP calls. Including SIP TLS and SRTP support for 30 calls. Or up to 16 SIP-to-SIP transcoded calls.

WAN Access*
Fiber SFP, G.SHDSL-EFM/ATM, Gigabit Ethernet or VDSL/ADSL WAN interface.

Full VoIP protocol support
SIPv2, SIPv2 over TLS, ISDN, DSS1, NI-2, QSIG**, T.38, G.722 HD voice, RTP Security with SRTP, fax and modem bypass, DTMF relay. SIP to SIP transcoding for up to 16 calls, non transcoding up to 200*** calls.

Full Telephony Features
SessionRouter allows flexible call routing and numbering plan adaptations, CLIP/CLIR, hold, transfer, and much more.

Complete Access Routing
Two 10/100/1000 Ethernet ports with auto MDI-X. Ethernet Layer 2 switching and bridging. Access router with NAT, Policy Based Routing, Stateful Firewall, PPPoE, DHCP, DynDNS.

Easy Management & Provisioning
Web-based management, WEB Wizard, SNMPv3, command line interface, secure, zero-touch provisioning separate config. domain support, TR-069.

Outstanding Interoperability
Interoperable for voice and T.38 fax with leading SIP service providers, soft-switch vendors, and Asterisk™ IP-PBX.

High Precision Clock
DECT PBX interoperability and improved fax performance with Stratum 3 CO quality clock (HP).

Why SmartNode?
- *Patton Quality*
- *Made in the USA*
- *Unrivaled Customer Support*
- *FREE Tech Support and Upgrades*

The SmartNode SN5570 Enterprise Session Border Controller bridges a wide range of IP-PBX products to their SIP Trunk service providers. With its built-in security features such as SIP TLS, SRTP, Stateful Firewall and secure provisioning, it protects the LAN networks from fraud strikes out of the Internet. Additionally it can terminate Broadband links for G.SHDSL, VDSL, ADSL or Fiber SFP.

With a wide spectrum of functionalities supported by the SN5570, it can be used as an IP Router, Access Device, VoIP Gateway & Survivability node in addition to an eSBC with transcoding capabilites.

The unique Web Wizard, enables an easy and hassle-free installation, and enables technical people to create their own Web interface.

With the separate config domain feature, the SN5570 will be the service demarcation point for SIP trunk service providers, so the local administrator only has to modify configuration settings facing the LAN IP-PBX.

The SmartNode SN5570 is the solution for service providers and network integrators looking for a VoIP product that matches up to ISDN standards in terms of features and quality and solves SIP to SIP interoperability issues.

Visit www.patton.com for more information.

Network Integration

Whether used as an Enterprise Session Border Controller or as a VoIP gateway/router, the SmartNode 5570 provides excellent VoIP, IP QoS and security features for seamless network integration. All PRI ports are configurable to be TE or NT, you can thus connect your PSTN line as well as an ISDN PRI PBX. For business class IP telephony at the tip of your fingers, the SmartNode SN5570 is more than just talk!
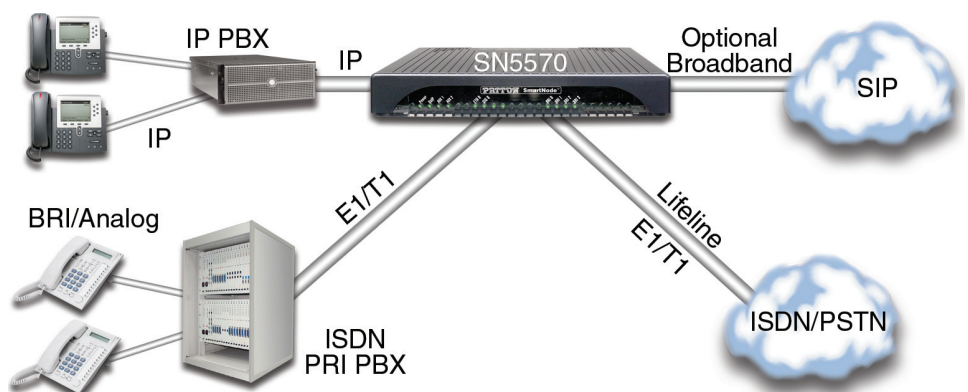
SmartNode™ Model 5570 eSBC/IAD

Specifications

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 and Hunt- Groups

ISDN
1 or 2 E1/T1 PRI ports*, RJ-45 (NE/TE)

DSS1, Q.921, Q.931, NI-2

HP High Precision Clock Stratum 3 CO

Lifeline Bypass Relay*

Optional QSIG support**

Voice Processing
G.722

G.711m/A-law

G.723.1 (6.4Kbps)

G.729, 729a, 729ab (8 kbps)

G.726 (16, 24, 32, 40 kbps)

G.168-2004 echo cancellation (128 ms)

30 simultaneous HD voice G722, G.711 or T.38 fax calls

30 calls with SRTP

Transparent ISDN data

16 SIP-to-SIP transcodec calls

Up to 200 SIP-to-SIP calls***

Silence suppression and comfort noise

Adaptive and configurable dejitter buffer

Configurable packet length

IP Quality of Service
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

Auto-MDIX

1 USB 2.0 host port

DHCP Client

DHCP Server

PPPoE Client (multi-session)

IP Multi-Netting, VLAN

IPv4 & IPv6 dual stack

ICMP

Dynamic and static NAT and NAPT

ACL, Stateful Firewall

DNS, DynDNS

SNTP Client

Broadband Access
ADSL/VDSL: VDSL 2, G.hs, G.Vectoring, up to profile 30a support • ADSL2, ADSL2+, Annex, A/L/M** or B/J** • IPoA, IPoEoA, PPPoA, PPPoEoA (RFC2364, RFC2516)

G.SHDSL-ATM: 4-wire G.SHDSL ITU-T G991.2, Annex A, B, F, G • Up to 11.4 Mbps • PPPoE • PPPoA, IPoA, 8PVCs, each UBR, CBR or VBR-rt selectable • I.610 OAM F4/F5 support • G.994.1 (G.hs)

G.SHDSL-EFM: EFM mode compliant to IEEE 802.3 G.998.2 • PPP over Ethernet (RFC2516) • Support of OAM PDU information and functionality (ITU-T Y.1731) • OAMPDU event notification, variable request, variable response, and loopback control

Fiber: SFP slot for fiber WAN uplink • 100Base-T and GigE support • Up to 8 VLANs • PPPoE

Management
Customizable WebWizard, Web-based GUI, CLI

Telnet and HTTP access

TR-069, TFTP, HTTP, HTTPS configuration up- and download

TR-069, TFTP, HTTP, HTTPS firmware upgrade, Dual 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 & Packaging
Power Consumption < 10W

Desktop/Wallmount plastic chassis

Dimensions
Plastic Enclosure (eSBC)

Dimensions: 8.2 x 1.3H x 6.5D inch (20.8W X 3.4H x 16.5D cm)

Weight: <.15.9 oz. (<450 g)

Metal Enclosure (IAD)

Dimensions: 12.11W x 1.77H x 6.09D inch (30.75W X 4.49H x 15.46D cm)

Weight: 25.6 oz (725 g)

Environment
Operating temp.: 32–104°F (0–40°C)

Operating humidity: up to 90%, non-condensing

Compliance
EMC: EN55022 and EN5502

Safety: EN 60950

CE

FCC Part 15 Class A; Part 68; CS-03

Specifications subject to change without notice | * Depending on model | ** Licensed Feature at additional charge | *** Supports up to 200 SIP-to-SIP calls under ideal conditions. Transcoding, debugging and/or IP Routing reduce processing capacity.