SmartNode™ Enterprise Session Border Controller & IAD

Model 5530

The SmartNode 5530, is a cost effective eSBC with integrated Broadband access and up to 8 BRI ports supporting a high level of VoIP and network security. It is capable of doing up to 200 SIP to SIP calls*** whereof max. 8 can be transcoded**. Built-in QoS functionalities and support of G.722 high definition codec, ensure excellent VoIP call quality.

Full VoIP protocol support
*SIPv2, SIPv2 over TLS, T.38, G.722 HD voice, RTP Security with SRTP, fax and modem bypass, DTMF relay. Up to 200 SIP to SIP calls***.*

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

2/4/8 Ports Quality ISDN VoIP
*2, 4 or 8 ISDN BRI S0 ports. Supports ISDN, DSS1, and QSIG**. Up to 16 G.722 or T.38 or G.711 or SRTP calls simultaneously.*

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

Outstanding Interoperability
Interoperable for voice and T.38 fax with leading SIP service providers, soft-switch vendors, and IP-PBX's.

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.

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 SN5530 series is the perfect choice for All-IP applications where legacy, non-replaceable ISDN equipment has to be integrated in to an UCC environment. For pure All-IP Networks, the SmartNode acts as a service termination point towards the enterprise with an integrated Broadband access termination for G.SHDSL, VDSL, ADSL or Fiber SFP. The SN5530 acts as VoIP Gateway, eSBC, Access Router and QoS CPE all in one device.

With the separate config domain feature, the SN5530 series will be the service demarcation point for SIP Trunk service providers, where the local administrator can be limited to only modifying configuration settings that face the LAN IP PBX.

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.

Visit www.patton.com for more information.

Network Integration

Whether used as an Enterprise Session Border Controller, as a VoIP gateway or WAN access Router, the SmartNode 5530 provides excellent VoIP, IP QoS and security features for seamless network integration. All BRI ports are configurable to be TE or NT, you can thus connect your telco line(s) as well as a PBX or ISDN terminals. The WAN interface eliminates the need of an external Modem or Access router, making the install and maintenance at the customer premise less complex, faster and cheaper.

SmartNode™ Model 5530 2–8 BRI eSBC/IAD

Integrated Access Device (IAD)

Enterprise Session Border Controller (eSBC)

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-Groups and Hunt-Groups

ISDN
2/4/8 BRI ports*, RJ45

NT/TE configurable per port

Built-in line power on each port (total 4W)

DSS1, Q.921, Q.931. NTT-64

HP High Precision Clock Stratum 3 CO

Point-point and point-multi-point

Lifeline Bypass Relay*

Optional QSIG support**

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)

4/8/16 simultaneous low-band-width voice or T.38 fax calls

Up to 16 HD calls with SRTP*

Up to 200 SIP to SIP calls**

Up to 8 SIP transcoded calls*

Transparent ISDN data

Silence suppression and com-fort noise

Adaptive and configurable dejitter buffer

Configurable packet length

SIP Session Capacity
4 SIP Sessions, license upgradeable up to 200***

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, PacketSmart Network analyzer

Connectivity
Two 10/100/1000Base-T Ethernet ports

USB 2.0 host port Auto-MDIX DHCP Client

PPPoE Client (multi-session)

IP Multi-Netting, VLAN, Secondary IP

IPv4 and IPv6 dual stack, ICMP

Dynamic and static NAT and NAPT

ACL, Stateful Firewall DNS, DynDNS DHCP Server

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 function-ality (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 down-load

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 Consumption
External Power: 100–240 VAC (50/60 Hz) | Consumption <10W

Packaging
Desktop/Wall-mount plastic chassis

Dimensions
Plastic Enclosure

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

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 temperature: 32–104°F (0–40°C)

Operating humidity: up to 90%, non-condensing

Compliance
FCC Part 15 Class A (US EMC)

CE per RTTE 99/5/EC (EMC and LVD)

Safety
EN60950

TBR-3 (ISDN BRI/So)

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.