

Multi-Port T1/E1 VoIP Integrated Access Device

SmartNode 4960

The SmartNode 4960 leads the migration of legacy telephony and switching equipment to the benefits of Voice-over-IP. With up to 120 simultaneous voice channels and four T1/E1/PRI ports the SN4960 leverages low-cost packet voice services while integrating into any network with advanced real-time IP QoS routing and secure Voice-over-VPN.



Providing a high-density seamless link between the circuit-switched telephone network and Voice-over-IP the SN4960 is ideal for PBX business trunking or corporate VoIP access. Offering up to four software configurable T1/E1/PRI interfaces the SN4960 connects to any switch, PBX and data network with up to 120 simultaneous calls using SIP, T1, E1

or PRI signaling. The dual 10/100/1000 Ethernet ports connects to the network for the highest throughput with its integrated QoS router. With its built-in CSU/DSU, any T1/E1 port can be selected as a WAN port for a truly integrated voice and data access

Like every SmartNode, the SN4960 delivers toll-quality voice with all industry standard CODECs including low-bandwidth G.723/G.729. Business class services are supported with T.38 fax, Fax bypass and modem bypass features.

The SmartNode 4960 is ready for SIP TLS and SRTP through software upgrades. Exclusive DownStreamQoS™ and Voice-over-VPN features give the clear advantage of uninterrupted and secure voice communication for any call today.

SPECIFICATIONS

Voice Connectivity: up to four software selectable T1/E1/PRI ports; 1200hm RJ-48C • Signalling support: CCS-ISDN DSS-1, NI-2, Q.SIG; CAS-RobbedBit E&M, E&M Immediate, wink, double wink; Loop and Ground start • SIPv2 & MGCP/IUA, H.323v4 • ISDN AOC/ECT • ISDN speech, audio & data (Fax Gr 4, UDI 64, RDI 64); ISDN supplementary services

Voice processing: Codec G.711 a-law/mu-law, G.723, G.729ab, G.726,

G.727, T.38 fax relay (9.6 k, 14.4 k) • G.711 transparent fax and bypass

Call routing and services: regular expression matching and manipulation; least cost routing; number blocking; short-dialing; digit collection, distribution and hunt groups.

Data interfaces: Dual 10/100/1000 TX Ethernet Ports; autosensing; auto-MDI; full-duplex.

IP Routing: IPv4 router RIPv1/2 • DHCP Client & server • packet fragmenta-

tion • static firewall, NAT, NAPT RFC 1631 access control lists

IP Quality of Service: Voice priority, DownStreamQoS • traffic management, shaping policing • IEEE 802.1p, TOS, DiffServ labeling • IEEE 802.1Q, VLAN tag insertion/deletion 4,096

Management: Web/HTTP, CLI with local console and remote Telnet access • TFTP configuration & firmware loading; SNMP v1 MIB II; secure autoprovisioning for both firmware and unit/subscriber

configuration; built-in diagnostic tools (trace, debug)

Environment: Temp: 0–40°C;

Humidity: 5–90% (non condensing)

Power: 100–240 VAC (50/60 Hz) • Power dissipation: 15W

Compliance: EMC compliance: EN55022 and EN55024 • Safety compliance: EN 60950 • CE compliance • FCC Part 15 Class A; Part 68; CS-03

FEATURES & BENEFITS

High Density up to 120 simultaneous voice or T.38 fax calls with one to four T1/E1/PRI ports and dual Gig Ethernet. Use any CODEC or fax on any port, any time.

Universal softswitch certified signaling support between all T1 RBS CAS, ISDN PRI, Q.SIG, SIP, H.323 and MGCP/IUA protocols.

DownStreamQoS and Voice-over-VPN with adaptive traffic management and shaping for maximum voice quality and secure voice communication.

ORDERING INFORMATION

SN4960/24V/UI: Single T1/E1/PRI VoIP IAD, 2xGig Ethernet, 24 VoIP channels, non-upgradable, no T1/E1 router, UI power.

SN4960/30V/UI: Single T1/E1/PRI VoIP IAD, 2xGig Ethernet, 30 VoIP channels, non-upgradable, no T1/E1 router, UI power.

SN4960/48V/UI: Four T1/E1/PRI VoIP IAD, 2xGig Ethernet, 48 VoIP channels upgradable to 60 channels, UI power.

SN4960/60V/UI: Four T1/E1/PRI VoIP IAD, 2xGig Ethernet, 60 VoIP channels, non-upgradable, UI power.

SN4960/96V/UI: Four T1/E1/PRI VoIP IAD, 2xGig Ethernet, 96 VoIP channels upgradable to 120 channels, UI power.

SN4960/120V/UI: Four T1/E1/PRI VoIP IAD, 2xGig Ethernet, 120 VoIP channels, non-upgradable, UI power

Options & Accessories

SNSW-49V6 6 channel Voice Expansion Key for SN4960 VoIP IADs. Software expansion for additional voice channels.

SNSW-VPN2: Software option for IPsec VPN, including DES/3DES and AES encryption, IKE and Voice-Over-VPN.

SNSW-QSIG2: Support for ISDN Q.SIG

Remote Office/Branch Office Voice Extension and Access diagram

