Product Name: Patton SmartNode SN4912/JS/RUI 12 Port FXS Analogue Gateway
Manufacturer: Patton Inalp
Model Number: SN4912/JS/RUI

Patton SmartNode SN4912/JS/RUI 12 Port FXS Analogue Gateway
Interoperable for voice and T.38 fax with leadingSIP service providers, soft-switch vendors andleading IP-PBX systems. The Patton SmartNode SN4912/JS/RUI 12 Port FXS Analogue Gateway is the ideal solutionfor service providers and enterprises requiring high-density analog connections for converged Internet-Telephony. Call centers, multi-tenant-units and PBX/switch extensions can now access the low-cost benefits of packet voice while WAN, data and VPN features permit direct access the IP network with full upstream and DownStream QoS™. The SN4900 supports 12 to 32 simultaneous VoIP calls over standard two-wire FXS connec-tions. The analog ports are presented on a singleAmphenol telco connector for convenient wiringcloset connection. Local LAN connectivity is pre-sented via dual 10/100 Ethernet ports. Traffic can be routed out either port for load-balancing and redundancy. Dual-redundant power supplies pro-tect against equipment down-time. Seamless and secure network integration withfixed IP, DHCP or PPPoE. Complete access rout-ing features include NAT/NAPT, Firewall, DynDNSand the optional IPsec VPN feature license offersecure data. Optional WAN uplink modules, available inV.35/X.21, T1/E1, and xDSL options, eliminate the need for extra network termination devicesand extra cost.
  Quality of Service (QoS) features included advanced voice prioritization and traffic manage-ment. DownStreamQoS™ ensures voice withoutinterruptions even over best-effort internet con-nections. Packet labeling according to 802.1p,TOS and DiffServ enableintegration into managedQoS networks. Integrated GUI andCommand Line, frontpanel status and call loadindicators and a full suite of management inter-faces ensure efficient setup, continuous trouble-free operation and cost-effective deployment. Full SIP and T.38 support Supports the complete range of industry stan-dard VoIP: SIP, H.323, T.38 fax, fax and modembypass, DTMF relay. Codecs G.729, G.723 etc. Secure Toll-Quality VoIP DownStreamQoS and Voice-over-VPN withadaptive traffic management and shaping formaximum voice quality and secure voice communication. Complete Access Routing Two 10/100 Ethernet ports with auto MDI-X.Access router with NAT, Firewall, PPPoE, DHCP,DynDNS, multiple VLANs & VPN with IPsec*. Optional Integrated WAN uplink Choose from V.35, X.21, T1/E1, ADSL andG.SHDSL data interfaces in addition to the twoEthernet ports. Specifications Capacity 12, 16, 24, 32 simultaneous VoIP calls Voice Signaling: SIPv2 H.323v4 (simultaneously with B2BUA capability)

• SIP call transfer, redirect
• DTMF in-band & out-of-ban
• All tones programmable (dial, ringing, busy)

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 Switching and Services Regular expression based call routing and number manipulation

• Number blocking
• Short-dialing
• Digit collection, distribution and hunt groups
• Transparent line extension

FXS Connectivity 2-wire Loopstart on 50pin (12 to 24 channels) or 64-pin (32 channels) Telcoconnector

• short haul loop 1.1km @3REN
• EuroPOTS (ETSI EG201188)
• programmable AC impedance, feeding, ring and on-hook voltage
• Caller-ID FSK and ITU V.23/Bell 202 generation

FXO Connectivity 2-wire Loopstart on 50pin (12 to 24 channels) or 64-pin (32 channels) Telcoconnector

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Data Services Two 10/100 Ethernet ports

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Data Services Two 10/100 Ethernet ports

• Complete IP access router
• DHCP Client & server
• Packet fragmentation
• Static firewall, NAT, NAPT RFC 1631 access control lists
• DMZ port

Quality of Service Voice priority

• DownStreamQoS™
• Traffic management, shaping and policing
• IEEE 802.1p, TOS, DiffServ labeling
• IEEE 802.1Q, VLAN tag insertion/deletion 4,096

Optional WAN interfaces X.21/V.35 Frame Relay (8 PVCs); RFC1490, FRF.12 fragmentation; LMI, Q.933D, ANSI 617D, Gang of Four; PPP, PAP, CHAP, LCP, IPCP)

• T1/E1 (ITU-T G.703, ANSI T1.403; & AMI, B8ZS, HDB3)
• ADSL2+ (Annex A, B, I, J, I, M, U-R2)
• G.SHDSL (G.991.2, Annex A, B, F, G, Up to 5.7Mbps, 8 PVCs, QoS)

Management Web/HTTP, CLI with local console and remote Telnet access

• TFTP configuration & firmware loading
• SNMP MIB II and product MIB
• Secure auto-provisioning for both firmware and unit/subscriber configuration
• Built-in diagnostic tools (trace, debug, call generator)

System CPU Motorola MPC875 @ 133 MHz

• Memory 32MB SDRAM/8MB Flash

Power 100–240 VAC (50/60 Hz)

• Power dissipation: > 22W (60W max, model SN4932/JS/RUI)

Temperature 0–50°C Humidity 5–80% (non condensing) Compliance EMC compliance: EN55022 and EN55024

• Safety compliance: EN 50950
• CE compliance
• FCC Part 15 Class A
• RoHS

Price: £1,072.03