T1/E1/PRI VoIP Gateways

SmartNode SN-SFP VoIP SFP Module, T1/E1 Emulation VoIP Gateway for up to 30 simultaneous calls





This E1/ISDN/PRI SFP Module can be installed in Routers, Ethernet Switches or Media Converters for easily integrating TDM and IP networks.

Overview

The SmartNode SFP Series is a VoIP Gateway in the Small-Form Pluggable (SFP) form factor as part of the market-leading SmartNode VoIP product family. It represents the next-generation adaptation of E1/ISDN emulation for IP Networks. Because the SFP module can be installed any router, switch or media gateway that has an SFP slot, it eliminates "box stacking" installations.

The SmartNode SFP is an ideal solution for service providers and network integrators serving enterprises looking transport E1 voice traffic over IP networks or for cost-effective ways to bridge E1 Trunks, PBX systems on multiple sites or connect them to a public Internet telephony service.

SmartNode products provide seamless network integration, continuous trouble-free operation and cost-effective deployment to protect your investments for the future. Preserve investments in legacy phone equipment while implementing unified communication solutions.

The unit supports ISDN PRI (DSS1, QSIG, Q.931), and MFC R2 (CAS) signaling used in the PSTN network and offers hardware echo cancellation for all E1 voice channels. It delivers 30 simultaneous G.711, fax-over-G.711, or T.38 fax relay calls. G.711 compression, DTMF (RFC2833), SIP INFO (RFC 2976) and Comfort Noise Generation (CNG) are also supported.

Features

- **Up to 30 VoIP calls** One ISDN PRI T1/E1 port supporting up to 30x G.711, fax-over-G.711, or T.38 fax relay calls simultaneously.
- Full VoIP and network protocol support SIPv2, IP, TCP, UDP, RTP, RTCP, ARP, NTP, HTTP, Telnet, IEEE 802.1Q, and IEEE 802.1P
- Extensive TDM signaling G.703 Interface with ISDN PRI (DSS1, QSIG, Q.931), and MFC R2 (CAS) with Hardware Echo Cancellation on all channels.
- Network Connectivity As you wish using any SFP enabled Router, Ethernet Switch or Media Converter. It works best with Patton SFP enabled All-IP Session Border Controllers.
- Outstanding Interoperability Interoperable for voice and T.38 fax with leading SIP service providers, softswitch vendors, and various IP-PBXs.
- Management & Provisioning Web-based GUI management, Telnet, SNMP v1/v2c Traps, updating software over HTTP, storing/recovering configuration, checking E1 port/signaling status.

Applications

The SN-SFP comes in both T1 and E1 variants and supports up to 30 channelized trunk connections in a single T1/E1 digital stream using either PRI or MFC R2 signaling. Facing

the IP network, this SFP digital gateway supports the SIP protocol. The physical connection to a PBX or PSTN (T1 or E1 interfaces) uses an RJ-45 connector and connects to the IP network using the SFP slot of an SBC, Media Converter, Ethernet Switch or Router.

