

# SmartNode™ Single-Port ISDN BRI VoIP Terminal Adapter

## Model SN-DTA



The SmartNode DTA (Digital Terminal Adapter) is a VoIP Gateway that connects ISDN terminals on one or two BRI/So ports, and converts up to 4 concurrent voice or fax calls to SIP or H.323.

### Up to Four Simultaneous SIP or T.38 Calls

With 1/2 ISDN So BRI ports and one 10/100Base-TX Ethernet port.

### Proven Interoperability

Interoperable with all major-brand softswitches and a wide range of Internet telephony providers.

### Comprehensive Signaling & Protocol Support

Supports SIP, H.323, ISDN telephony plus T.38 and SuperG3 FAX over TDM/PSTN and IP/Ethernet services simultaneously.

### Transparent ISDN Features

Complex number manipulation and mapping for seamless integration with existing infrastructures, CLIP, CLIR, AOC, PARE, hold, transfer, SIP overlap dialing and much more.

### Instant ISDN to VoIP Connectivity

Provides one or two internally powered So interfaces for up to 8 terminals. Simultaneously converts up to 4 voice and fax calls to VoIP.

### High Precision Clock (HP models)

Delivers DECT PBX interoperability with reliable fax and modem performance.

### Management & Provisioning

Built-in Web-based management, SNMP, command line interface and auto-provisioning for automated configuration distribution and software upgrades. RADIUS for call detail records (CDR) and user authentication.

### Supported by SmartNode™

#### Redirection Service

A free service enabling zero-touch mass deployments for Service Providers and Distributors with auto-provisioning servers.

The SmartNode DTA enables integration of ISDN network users into a local VoIP phone service, or extends an ISDN line of a PBX to a remote site over IP. It offers a simple end-user configuration interface and connects both to a PBX in point-to-point mode and an So bus in point-multipoint mode.

The SN-DTA enables the connection of ISDN terminals or SOHO PBXs to a VoIP network or Internet Telephony Service. It can connect to ISDN PBXs in point-to-point mode and ISDN Terminals in point-multipoint mode (S-Bus) and offers a feature rich configuration interface.

Like every SmartNode the DTA includes intelligent call routing technology with advanced features like number plan adaptations, mappings between ISDN and SIP/H.323, manipulation of call properties through regular expressions, routing calls based on time-of-day or bearer capability criteria and much more.

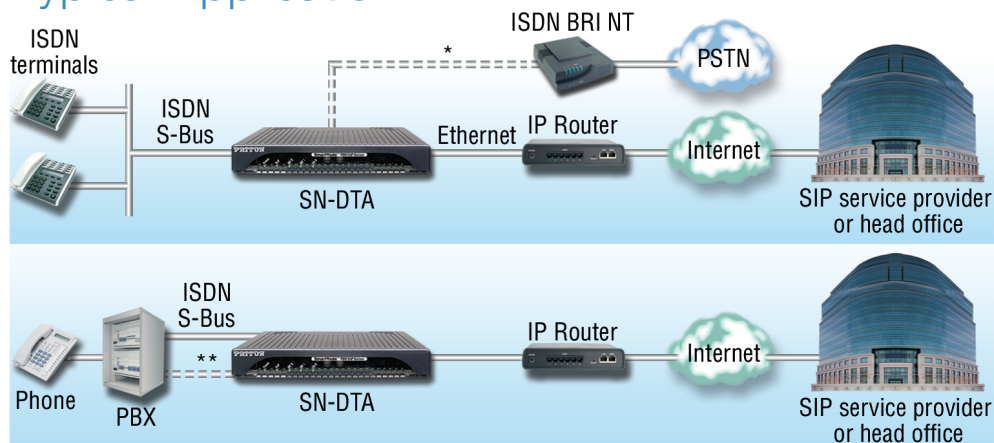
Key ISDN services such as AOC, PARE, CLIP, COLP, etc. are mapped using industry standard methods to SIP and H.323.

The SN-DTA supports SIP overlap dialing (RFC3578) for countries with dynamic dialplans. The integrated ISDN line-power feeds connected terminals in the same way as a legacy ISDN NT to enable a seamless switchover from an ISDN to VoIP access.

Gateway functions use standard CODECs such as G.711, G.723, G.729, and T.38 fax as well as industry standard SIP and H.323 signaling protocols to ensure seamless connection and compatibility for all voice services. Comprehensive quality of service (QoS) features offer traffic classification and tagging options that include TOS, DiffServ and VLAN 802.1p/Q tagging.

Visit [www.patton.com](http://www.patton.com) for more information.

## Typical Application



\* ISDN PSTN fallback with relay (SN-DTA/2BIS2V/EUI only)

\*\* SN-DTA/2BIS4V/EUI only

# SmartNode™ SN-DTA ISDN Digital Terminal Adapter



## Specifications

### WAN Connectivity

10/100Base-T Ethernet LAN • Auto-MDI-X • DHCP Client • PPPoE Client (multi-session) • SNTP • IP Multinetting • VLAN

### IP Quality of Service

IEEE 802.1p, TOS, DiffServ Labeling • IEEE 802.1Q, VLAN Tag insertion/deletion (4,096 VLANs)

### Management

Web-based GUI • Fully documented CLI • Telnet and HTTP access • TFTP configuration up- and download • TFTP/HTTP firmware upgrade • SNMPv1 agent, MIB II and enterprise MIB • Built-in diagnostic tools • Auto-

Provisioning—Configuration and Firmware, Syslog, RADIUS

### Fax and Modem Support

T.38 fax over IP • Fax relay and bypass • Modem bypass

### ISDN Specification

1/2 port Euro-ISDN BRI/So RJ-45, NT/TE • DSS-1, Q.921, Q.931 • Point-to-point & point-to-multipoint • Line power for ISDN terminals, high precision clock option (HP models)

### Voice Signaling

SIPv2 • H.323v4 • SIP call transfer, redirect • Overlap or en-bloc dialing • DTMF in-band & out-of-band • Configurable call progress tones • CLIP • CLIR • AOC • PARE

### Call Routing & Services

Regular expression number matching • Regular expression number manipulation • Least Cost Routing Number blocking • Short-Dialing • Digit collection • Distribution-Groups & Hunt-Groups • 2nd call offering

### Voice Processing

G.723.1 (5.3/6.3 kbps) • G.729, G.729a, G.729ab (8 kbps) • G.726 ADPCM (16, 24, 32, 40 kbps) • G.168 echo cancellation (25 ms) • Transparent ISDN data • Silence suppression and comfort noise • Adaptive and configurable dejitter buffer • Configurable packet length

### Power Consumption

< 4W

### Operating Temperature

0 to 40°C (32 to 104°F)

### Dimensions

20.8W x 3.4H x 16.5D cm (8.2W x 1.3H x 6.5D in.)

### Weight

< 450 g (15.9 oz)

### Humidity

Up to 90%, non condensing

### Compliance

FCC Part 15 Class B (US EMC) • CE per RTTE 99/5/EC (EMC and LVD) • Safety—EN60950 • TBR-3 (ISDN BRI/So)



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