

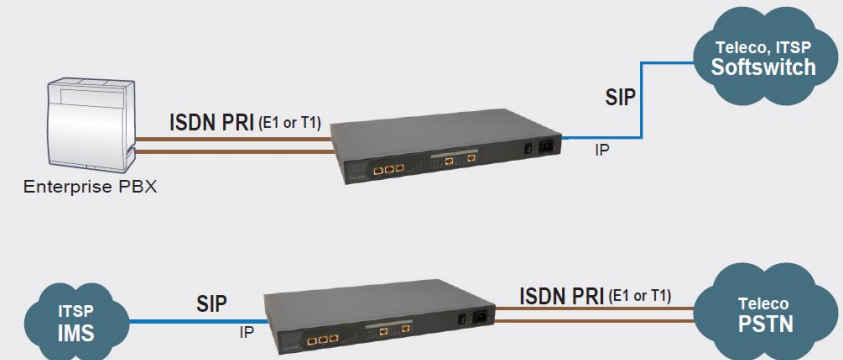
# E1/T1 ISDN Trunk Gateway

24/30/48/60 digital voice channels



**SP1710T** Single E1/T1, 1 WAN 2 LAN

**SP1720T** Dual E1/T1, 1 WAN 2 LAN



**APPLICATION**

## Voice Features

- G.711 a/μ, G.726(32K), G.729A, G.723.1
- Silence Suppression and Detection
- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Echo Cancellation (G.168)
- Adjustable jitter buffer
- Adjustable packet time (by Codec type)
- Programmable Gain Control
- Adjustable call progress tone volume
- TLS and SRTP encryption (optional)

## Network Specifications

- WAN: Static IP, PPPoE, DHCP
- Support IPv4, IPv6(optional)
- QoS Support:
  - WAN: DiffServ, IP Precedence
- DDNS Support
- Network Protocol Support:
  - IP, TCP, UDP, TFTP, FTP, RTP, RTCP,
  - ARP, ICMP, NTP, DHCP, STUN Client,
  - HTTP, HTTPS, DNS, DNS SRV, Telnet

## Device Management

- Web Based Configuration
- Telnet command line interface (CLI)
- IVR Configuration
- FTP / TFTP / HTTP Software Upgrade
- Configuration Backup and Restore
- SNMP V3/ V2c/ V1(optional)

## Digital Interface

- Supported Switch Types:
  - ETSI, DMS, NET2, 5ESS
- Line coding:
  - E1 ISDN PRI: HDB3
  - T1 ISDN PRI: B8ZS, AMI
- Line Impedance :
  - E1 120 Ohm, Balanced
  - T1 100 Ohm ■
- Framing :
  - E1: ITU-T G.704
  - T1: SF, SLC96, ESF ■
- ISDN Role:
  - Network or User Side
- Clock: Internal or External timing



## Ordering Information

Model	Description		
	WAN	LAN	ISDN E1/T1
SP1710T	1	2	1
SP1720T	1	2	2

## General Information

Dimensions: W 44.5cm x H 4.5cm x D 25cm

Weight: 3.8 kg; 19" Standard Rack-mountable

Power : AC 100~240V 50/60Hz input

Operating temperature: 0°C ~ 45°C

Storage temperature: -20°C ~ 70°C

Operation Humidity: Up to 90% RH, non-condensing



\* Other trademarks and trade names may be used in this document to refer to either the entities claiming the marks and names or their products.  
\* Specifications, availability and terms of offers may change without notice.

## SIP Account Management

- By channel registration
- By E1/T1 registration (share account)
- Invite with Challenge
- Support RFC3986 SIP URI format

## SIP Method Support

ACK, BYE, CANCEL, INFO, INVITE, MESSAGE, NOTIFY, OPTIONS, PING, PRACK, PUBLISH, REFER, REGISTER, SUBSCRIBE, UPDATE

## SIP Call Features

- Peer to Peer Call
- Call Forward - unconditional, busy
- Do Not Disturb
- Speed Dialing
- Hot Line and Warm Line

## SIP Call Management

- Support Outbound Proxy
- Support SIP Compact Form
- SIP Registration Failover
- Group Hunting
- P-Asserted-Identity per RFC3325
- Privacy Mechanism per RFC3323
- Session Timers (Update / Re-invite)
- DNS SRV Support
- Call Types: Voice / Modem / FAX
- User Programmable Dial Plan
- CDR by RADIUS client
- Manual Peer Table (for P2P calls)
- E.164 Numbering, ENUM support

## Telephony Specifications

- In-Band DTMF, Out-of-Band DTMF Relay (RFC2833 or SIP INFO)
- Caller ID
- T.30 FAX passthrough, T.38 Real Time FAX Relay

## E1 Loopback

- Digital loopback (DLBK)
- Remote loopback (RLBK)
- ST-BUS loopback (SLBK)
- Payload loopback (PLBK)
- Metallic loopback (MLBK)
- Per time slot Local loopback (LTSL)
- Per time slot remote (RTSL)

## STANDARD COMPLIANCE

### SIP, Voice and FAX Related Standard

- RFC1889
- RFC5359
- RFC3824
- RFC2543
- RFC3265
- RFC3841
- RFC2833
- RFC3311
- RFC3842
- RFC2880
- RFC3323
- RFC3891
- RFC2976
- RFC3325
- RFC3892
- RFC3261
- RFC3362
- RFC3960
- RFC3262
- RFC3515
- RFC3986
- RFC3263
- RFC3550
- RFC4028
- RFC3264
- RFC3665

## Security Specifications

- DIGEST Authentication
- MD5 Encryption
- DoS Protection
- Caller Filter by IP address

## Physical

- WAN : 1 x 100 BaseTx, auto cross-over, auto speed negotiation, RJ-45 connector
- LAN : 2 x 100 BaseTx switch, auto cross-over, auto speed negotiation, RJ-45 connector
- E1/T1 : RJ48C
- Factory default and Reset button

## LED Indicators

- Power, Alarm, VoIP, Run, AIS, RAI, LINK, LOS, LBK, WAN, LAN

## Network Related Standard

- RFC318
- RFC1305
- RFC2516
- RFC791
- RFC1321
- RFC2616
- RFC792
- RFC1349
- RFC2617
- RFC793
- RFC1350
- RFC2637
- RFC768
- RFC1661
- RFC2766
- RFC826
- RFC1738
- RFC2782
- RFC959
- RFC2854
- RFC2818
- RFC1034
- RFC2131
- RFC2916
- RFC1035
- RFC2136
- RFC3022
- RFC1058
- RFC2327
- RFC3489
- RFC1157
- RFC2474