

Mini VoIP Router



SP350DS 2 FXS 1 WAN 1 LAN
VoIP, FAX, Internet, Intercom

Voice Features

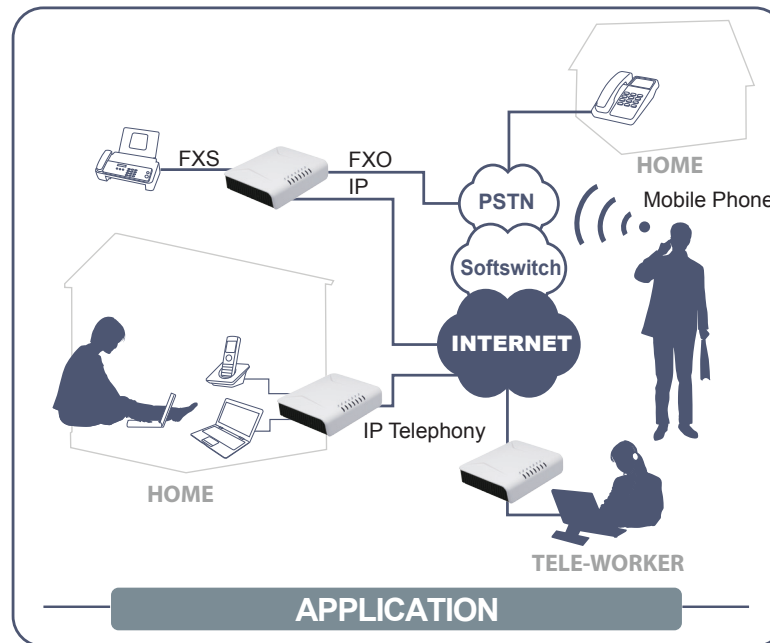
- G.722 64kbps, G.711 a/μ-law, G.729A, G.726, G.723.1
GSM 6.10 Full Rate, iLBC 13.3 kbps
- DTMF Detection and Generation
- Silence Suppression & Detection
- Comfort Noise Generation (CNG)
- Voice Activity Detection (VAD)
- Echo Cancellation (G.168)
- Dynamic Jitter Buffer
- Call progress tone detection (FXO) and generation (FXS)
- Programmable Gain Control
- Inbuilt Local Mixer
- ITU-T V.152 Voice-band Data over IP Networks



SP350SO 1 FXS 1 FXO 1 WAN 1 LAN
VoIP, PSTN, FAX, Internet

IP Network Specifications

- WAN: Static IP, PPPoE, DHCP, PPTP and L2TP
- NAT Functions
Support up to 250 Clients
Port Forwarding (Virtual Servers)
DMZ
- Support IPv4, IPv6(optional)
- QoS Support:
WAN: DiffServ, IP Precedence, Priority Queue
Rate Control, 802.1Q (VLAN Tagging),
802.1p (Priority Tag)
LAN: Rate Limit
- DDNS Support
- Network Protocol Support:
IP, TCP, UDP, TFTP, FTP, RTP, RTCP, ARP, ICMP,
NTP, DHCP, STUN Client, HTTP, HTTPS, DNS,
DNS SRV, Telnet, UPnP, IGMP, IGMP snooping,
IGMP proxy, RTSP ALG, SIP ALG



Device Management

- Web Based Configuration
- Telnet command line interface (CLI)
- IVR Configuration
- FTP / TFTP / HTTP Software Upgrade
- Configuration Backup and Restore
- Factory Defaults
- TR-069, TR-098, TR-104
- TR-111 part I & II (DHCP option 125)
- DHCP option 43, 60 Auto Provisioning
- SNMP V3/ V2c/ V1(optional)

Mini VoIP Router



Ordering Information

Model	Description			
	WAN	LAN	FXS	FXO
SP350DS	1	1	2	
SP350SO	1	1	1	1

General Information

Dimensions: W 13.8cm x H 3.19cm x D 9.86cm

Weight: 150g

Power : AC 100~240V 50/60Hz input, DC 12V/1A output

Operating temperature: 0°C ~ 45°C

Storage temperature: -20°C ~ 70°C

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



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* Specifications, availability and terms of offers may change without notice.

SIP Account Management

- By port registration
- By device registration (share account)
- Mixed mode
(Hunt number for inbound, by port number for outbound)
- Invite with Challenge
- IP Address or Domain Name registration
- 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 Hold / Retrieve
- Call Waiting
- Call Pick Up
- Call Park / Retrieve (SIP Server Required)
- Call Forward - unconditional, busy, no answer
- Call Transfer - attended, unattended
- Do Not Disturb
- Speed Dialing
- Repeat Dialing
- Three-way Calling
- MWI (RFC-3842)
- 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 Support
- Automatic Calling Number Manipulation
- CDR by RADIUS client
- Manual Peer Table (for P2P calls)
- E.164 Numbering, ENUM support

Telephony Specifications

- Configurable Payphone charging pulse interval by SIP OPTION
- In-Band DTMF, Out-of-Band DTMF Relay (RFC2833 or SIP INFO)
- DTMF / PULSE Dial
- Caller ID Generation / Detection:
 - DTMF
 - FSK-Bellcore Type 1 & 2
 - FSK-ETSI Type 1 & 2
 - FSK-NTT
 - FSK: Calling Name, Number, Date and Time, VMWI
- FXS metering pulse options:
 - Polarity Reversal
 - 12kHz calling tone
 - 16kHz calling tone
- Configurable Payphone charging signal interval by SIP OPTION
- Polarity Reversal Detection (FXO) and Generation (FXS)
- T.30 FAX passthrough, T.38 Real Time FAX Relay
- Auto PSTN bypass at network or power failure(SP350SO)
- ROH Tone (Receiver Off-Hook Tone @ 480 Hz)
- Loop Current Suppression
- Call Feature enable/disable via phoneset

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

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

Security Specifications

- DIGEST Authentication
- MD5 Encryption
- DoS Protection
- Caller Filter by IP address
- IP Filter
- SIP/TLS and sRTP(optional)

Physical

- WAN : 1 x 100 baseTx, auto cross-over, auto speed negotiation, RJ-45 connector
- LAN : 1 x 100 baseTx, auto cross-over, auto speed negotiation, RJ-45 connector
- Telephone : RJ11 FXS or FXO port
- Factory default and Reset button Power jack

LED Indicators

- SP350DS : Power, Alarm, Register, Phone 1, Phone 2, WAN, LAN
- SP350SO : Power, Alarm, Register, Phone, Line, WAN, LAN