

## FXS VoIP analog Access Gateway

### TSV-1000-16S



#### Description:

TSV-1000-16S is a multi-functional analog gateway offering seamless connectivity between IP-based telephony networks and legacy telephones (POTS), fax machines and PBX systems. With the standard RJ11 and RJ21 interfaces, the device offers 16FXS ports. It is ideally suited for small and medium businesses, call centers and multi-location environments that need VoIP services. TSV-1000-16S supports the standard SIP protocol and it's compatible with leading IMS/NGN platforms and SIP-based IP telephony systems.

#### Key features

- ♣ Cost effective gateway with 16 FXS ports
- ♣ Fax over IP (T.38 and Pass-Through)
- ♣ Support IPv4 and IPv6
- ♣ TR069 and SNMP
- ♣ Elastix/Broadsoft Certification
- ♣ Multiple codecs: G.711A/U,G.723.1,G.729A/B,AMR,G.726 etc.
- ♣ Fully compatible with leading IMS/NGN, SIP based IP telephony system

#### Physical interface :

- Capacity 32 FXS with RJ11 .
- Ethernet Interfaces: 4\* LAN, 10/100Mbps, RJ-45
- Console 1\*RS232, 115200bps

#### FXS

- Connector: RJ11 and RJ21
- Dial Mode: DTMF and Pulse
- Pulse: 10 and 20 PPS
- Caller ID: DTMF/FSK CLI Presentation
- Max Cable Length: 3km
- Reversed Polarity
- Programmable Call Progress Tone
- Internal Call

#### VOICE & FAX:

- G.711A/U law, G.723.1, G.729A/B,G.726, AMR,iLBC
- Silence Suppression
- Comfort Noise Generation(CNG)

- Voice Activity Detection(VAD)
- Echo Cancellation(G.168), with up to 128ms
- Adaptive (Dynamic) Jitter Buffer
- Hook Flash
- Programmable Gain Control
- T.38/Pass-through
- Modem/POS • DTMF mode: Signal/RFC2833/INBAND • VLAN 802.1P/802.1Q
- Layer3 QoS and DiffServ

## VOIP

- Protocol: SIP v2.0 (UDP/TCP),RFC3261 SDP,RTP(RFC2833), RFC3262, 3263,3264,3265,3515,2976,3311
- RTP/RTCP, RFC2198, 1889
- RFC4028 Session Timer
- RFC3266 IPv6 in SDP
- RFC2806 TEL URI
- RFC3581 NAT,rport
- Primary/Backup SIP Server
- Outbound Proxy • DNS SRV/ A Query/NATPR Query
- SIP Trunk
- Early Media/Early Answer
- NAT:STUN, Static/Dynamic NAT

## Supplementary Service

- Call Waiting • Blind Transfer
- Attend Transfer
- Call Forward on Busy
- Call Forward on No Reply
- Unconditional Call Forward
- Warm/Immediately Hotline
- Call Hold • Do-not-disturb
- 3-Way Conference
- Message Waiting Indicator

## Maintenance

- SNMP v1/v2/v3
- TR069
- Auto Provisioning
- Web/Telnet
- Configuration Backup/Restore
- Firmware Upgrade via Web
- CDR
- Syslog
- Ping/Tracert Test
- Network Capture

- Outward Test(GR909)
- NTP/Daylight Saving Time
- IVR local Maintenance
- Cloud-based Management

## Software Features

- Hunting Group
- Web ACL
- Telnet ACL
- Action URL
- PPPoE/IPv4/IPv6
- Digitmap
- Routing Rules based Prefixes
- Caller/Called Number Manipulation

## Environmental

- Power Supply: 100-240VAC, 50-60 Hz
- Power Consumption:40W(Typical)
- Operating Temperature:0 °C ~ 45 °C Storage Temperature: -20 °C ~80 °C
- Humidity:10%-90% Non-Condensing
- Dimensions(W/D/H): 440\*250\*44mm
- Unit Weight: 3.2kg
- Compliance: CE, FCC