

Netkrom FXS/FXO VoIP Gateway

Netkrom 1FXS/1FXO and 2FXS/2FXO provides Voice over IP and FAX over IP services for ITSP / ISP Internet Telephony Services Provider and Office / SOHO IP-PBX application.



Netkrom 1FXS/1FXO and 2FXS/2FXO is a one FXS + one FXO / two FXS + two FXO ports gateway. Two 100Base-T ports connect the Netkrom 1FXS/1FXO and 2FXS/2FXO to IP-network. Different telephone interfaces and support of an innovative intelligent call routing function, which allows routing of calls from any interface to any another, make this device very flexible and increase its applications.

Netkrom 1FXS/1FXO and 2FXS/2FXO supported H.323 v2/v3/v4 and SIP protocol. It also provides various voice codec i.e. G.711A/u-Law, G.723.1, G.729 and G.729A with Dynamic Jitter Buffer and Bad frame interpolation.

Netkrom 1FXS/1FXO and 2FXS/2FXO provides management features for system Configuration, Debug and Maintenance via RS-232C COM port and TELNET. It also supports a GUI Web-based management.

Features:

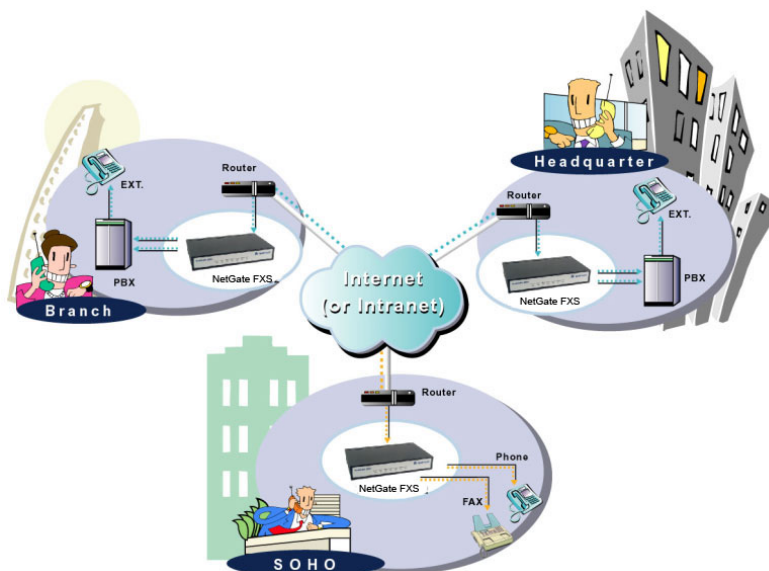
- ✦ ITU-T H.323 v2/v3/v4 compliance
- ✦ Support SIP Protocol (*)
- ✦ Automatically Dial Path Selection (IP or PSTN)
- ✦ PSTN Line switch to telephone set when power is failure.
- ✦ PPPoE
- ✦ Behind NAT router or IP sharing device
- ✦ DNS server inquiry
- ✦ Automatically Gatekeeper Discovery
- ✦ Provide Peer-to-Peer Mode (Non Gatekeeper needed) selection
- ✦ E.164 Dial Plan
- ✦ DTMF detection/generation
- ✦ TFTP/FTP software upgrade
- ✦ Remote configuration/reset
- ✦ LED indication for system status
- ✦ MS-NetMeeting v3.0 compatible
- ✦ Support Fix IP and DHCP
- ✦ Parameters of VoIP packet
- ✦ MGCP (*)

Benefits:

- ✦ Easy access to IP from phone set or PBX
- ✦ Cost Saving - Telephone call from VPN or public Internet
- ✦ Follows the existing telephone call dial plan
- ✦ Easy interface to ADSL/Cable Modem or Leased line equipment

Applications:

- ✦ ISP/ITSP (Internet Telephony Service Provider)
- ✦ Multi-nation enterprise communication
- ✦ SOHO Telephony
- ✦ IP-PBX with office telephony services
- ✦ Telephone /PBX call via IP network
- ✦ FAX over IP (FoIP) device




Specifications:

Protocol	<ul style="list-style-type: none"> ◦ ITU-T H.323 v2/v3/v4 compliance ◦ SIP RFC3261 (*)
Supplementary service	H.450 (Call Hold, Call Transfer, Call forward)
FAX support	<ul style="list-style-type: none"> ◦ Automatically FAX detection ◦ Group 3 Fax relay at 2.4 - 14.4 kbps ◦ Support T.38 protocol ◦ Support T.38 ECM: Error correction during the high speed mode ◦ Support T.38 FAX Redundancy Depth ◦ Support Abstract Syntax Notation 1 (ASN.1) ◦ G.711 FAX Mode
Codec	G.711A/u-law, G.723.1, G.729A, G.729
Network Interface	Two 10/100Base-T Ethernet RJ-45 port
FXS Interface	<ul style="list-style-type: none"> ◦ One Telephone (FXS) RJ-11 port for Netkrom 1FXS/1FXO ◦ Two Telephone (FXS) RJ-11 ports for Netkrom 2FXS/2FXO
FXO Interface	<ul style="list-style-type: none"> ◦ One Analog PSTN (FXO) RJ-11 port for Netkrom 1FXS/1FXO ◦ Two Analog PSTN (FXO) RJ-11 ports for Netkrom 2FXS/2FXO
FXS Features	<ul style="list-style-type: none"> ◦ Line polarity reversal generation ◦ 2-wire loop start ◦ Caller ID (DTMF/FSK) generation
FXO Features	<ul style="list-style-type: none"> ◦ Support auto-attendant (Tone or voice greeting) ◦ PSTN polarity reversal detection ◦ Provide 2nd dial tone to PSTN ◦ Disconnect tone detection
Voice Quality	<ul style="list-style-type: none"> ◦ VAD (Voice Activity Detection) ◦ CNG (Comfort Noise Generation) ◦ AEC (Acoustic Echo Cancellation) -- G.168/165 ◦ Dynamic Jitter Buffer ◦ Completed voice band signaling support ◦ Provide In-band or Out-band DTMF generation/ detection
Audio Feature	<ul style="list-style-type: none"> ◦ Codec -- G.711 A/u-Law, G.723.1, G.729A, G.729 ◦ G.168/165-compliant adaptive echo cancellation ◦ Dynamic Jitter Buffer ◦ Completed voice band signaling support ◦ Provide Inband or Outband DTMF generation/detection ◦ Provide call progress tone
QoS	QoS by setting DSCP (Differentiated Service Code Point) parameters of VoIP packet
Caller ID	Caller ID (Bellcore or FSK) detection
Console	Asynchronous Console RS-232C DB-9 connector
Tone	Provide call progress tone
TCP/IP	Support Fixed IP and DHCP
ADSL Environment	PPPoE
Firewall Environment	Behind NAT Router or IP sharing device
Configuration & management	Console port, TELNET and Web Browser configuration
Upgrade	TFTP/FTP software upgrade
Power	Input AC 100V~240V Output DC12V
Led Indicator	<ul style="list-style-type: none"> ◦ POWER: Power ON indication ◦ TEL1 to TEL2: LED indicator for telephone port status (FXS) ◦ LINE1 to LINE2: LED indicator for PSTN port 1-2 status (FXO) ◦ STATUS: Netkrom 1FXS/1FXO and 2FXS/2FXO register to Gatekeeper status ◦ READY: Netkrom 1FXS/1FXO and 2FXS/2FXO operation status ◦ WAN: LINK / ACT: Link and active status - 10 or 10/100Base-T status ◦ LAN: LINK / ACT: Link and active status - 10 or 10/100Base-T status
Certification	UL, CE, FCC
Operation Temp	0° C to 40° C

Humidity	10% to 90% (Non-condensing)
Chassis	◦ Dimension: 223mm(W) x 35mm(H) x 152mm(D) ◦ Weight (unit): 1.5 kg

(*) Contact Netkrom for availability of SIP protocol.

Ordering Information:

-  **1FXS/1FXO** Netkrom VoIP Gateway 1FXS/1FXO Port
-  **2FXS/2FXO** Netkrom VoIP Gateway 2FXS/2FXO Port