

## Relay Media Gateway

Model : KNGW-E1T1



### Description

The KNGW-E1T1 is a new generation intelligent voice gateway designed for the business needs of enterprises/industries/operators. Based on the design concept of maintainability, manageability and operation, it has the characteristics of carrier-grade, high-density, large-capacity and enhanced functions such as IP voice, IP fax, modem and voice recognition, providing users with flexible and efficient structure. It is a communication network for the future.

The KNGW-E1T1 relay gateway supports multiple signaling protocols to implement traditional signaling SS7, PRI, signaling between No. 1 and SIP. It supports multiple voice codecs, provides complete codec capability, provides users with high-quality voice and improves the use efficiency of relay resources. It is widely used in access networks of all sizes, such as small and medium-sized enterprises, call centers, operators and large enterprises.

### Main characteristics

- High cost performance, strong business expansion capability, maximum support for 60 concurrent
- Service-oriented architecture, rich service support, support for voice, IP fax and Modem/POS services
- Flexible dialing rules and operations, users can customize the dialing rules and quantity according to different countries and regions to adapt to different work scenarios.
- Multiple coding standards: G.711A/U, G.723.1, G.729A/B, iLBC, AMR
- Good compatibility, support Huawei SoftX3000, ZTE, Cisco and other softswitch platforms

### Physical specification

- Quantity of E1/T1 ports  
1/2 E1/T1
- Interface Type
- RJ48 (impedance 120  $\Omega$ )
- Ethernet interface
- FE1:10/100 Base-T Adaptive Ethernet
- FE0:10/100 Base-T Adaptive Ethernet
- Serial port  
1\*RS232,115200bps

### PSTN

- ISDN PRI  
23B+D(T1), 30B+D(E1), NT or TE configurable ITU-T Q.921, ITU-T Q.931, Q.Sig
- Signaling No.7/SS7 ITU-T, ANSI, ITU-CHINA
- Signaling No.1/R2 MFC  
China No.1 and 22 other variants  
MTP1/MTP2/MTP3, TUP/ISUP
- E1 frame format type  
DF, CRC-4, CRC ITU
- T1 frame format type  
4-Frame Multi-frame(F4,FT),2-Frame  
Multi-frame (F12, D3/4), Extended Super-frame (F24, ESF), Remote Switch Mode  
(F72, SLC96)
- Line coding method  
E1: NRZ,CMI, AMI, HDB3  
T1:NRZ,CMI, AMI, B8ZS

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### Speech characteristics

- Speech coding:G.711a/ $\mu$  law,G.723.1,G.729AB  
iLBC,AMR
- Mute suppression and detection
- Comfort noise generation
- Voice activity detection
- Echo cancellation(G.168),up to 128ms
- Adaptive dynamic buffering
- Voice, fax gain control
- Fax: T.38 and Pass-through
- Support Modem/POS
- DTMF mode: RFC2833/SIP Info/In-band
- Clear Mode

### VoIP protocol

- SIP v2.0(UDP/TCP),RFC3261 SDP,RTP(RFC2833),RFC3262  
3263,3264,3265,3515,2976,3311
- RTP/RTCP,RFC2198,1889
- SIP-T,RFC3372,RFC3204,RFC3398
- SIP relay working mode: Peer/Access
- SIP/IMS registered account: up to 256
- NAT: Dynamic NAT, Rport

### Software features

- Local ringback/color ring pass
- Overlapping Number-Receiving
- Dialing rules, up to 2000
- Relay group by E1 port/slot
- IP relay group configuration
- Speech codec grouping
- White list of calling and called numbers
- Blacklist of calling and called numbers
- IP access list firewall function
- IP relay priority
- Voice and signaling encryption (VOS RC4)

### Management and maintenance

- Web-based visual configuration and maintenance
- Data backup/recovery
- PSTN call and release reason statistics
- SIP trunk call and release reason statistics
- TFTP/Web firmware upgrade
- Network capture
- SNMP v1/v2/v3
- System log: Debug, Info, Error
- Warning , Notice
- Calling bill
- NTP automatic time synchronization
- Support centralized cloud integrated management platform

### Call processing

- Flexible routing
- PSTN-PSTN,PSTN-IP, IP-IP,IP-PSTN
- Redundant route backup/selection
- Control call routing by time period
- Routing by primary/called number prefix
- Support 256 routing rules in different directions
- Master called number change
- Support 128 number change rules

### Physical characteristics

Power supply: 100-240VAC, 50-60 Hz

- Power consumption: 10W
- Operating temperature: 0°C~45°C Storage temperature: -20°C~80°C
- Humidity: 10%-90% without condensation
- Size (W/D/H):436\*300\*44.5mm(1U)
- Weight: 2.0kg
- Certification: CE,FCC

### Size

unit:mm



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