SHENZHEN ETROSS TELECOM CO.,LTD.

GSM Gateway ETS16x8G Datasheet

1.1 Overview

GSM VoIP gateway ETS16x8G is newly designed IP to GSM gateway supporting maximum 16 ports 128SIMs of GSM Voice interface, it can effectively realize the smooth transition between PLMN(GSM) and VoIP network. Compact cost effective design and system architecture of GSM Gateway ETS-16x8G provides customer satisfaction in high quality , performance and system reliance.

Mostly important, GSM Gateway ETS-16x8 features with new functions such as multi-SIM rotation, Human behaviour, BTS rotation,proxy server encryption for anti IP block, ETS bandwidth optimization , Auto IMEI change and generation, auto activation SIM card etc.

This product uses the state-of-art technology voice compression and Smart QoS of ETS to maintain the maximum voice quality under fast internet line and slow internet line as well, thus It is an ideal gateway for heavy duty VoIP call termination (VoIP to GSM) and Origination (GSM to VoIP), it is fully compatible with leading soft switch and SIP server.

ETROSS

SHENZHEN ETROSS TELECOM CO.,LTD.

1.2 Main features

Support 16 GSM ports, up to 16 concurrent calls (1 Ports 8 SIM card ,total 128 SIM card)

Support GSM: Quad-band 850/900/1800/1900Mhz

CDMA: 450/ 800/ 1900Mhz optional

3G/UMTS: 850/900/2100Mhz optional

Support multi-sim card rotation to avoid sim block

Support BTS rotation and lock

Support encryption for VOS for anti-block of IP port

Support Human behaviour function

Support SMS Sending / batch SMS Sending / receiving

Support USSD balance enquiry

Auto activation SIM card and recharge

Support IMEI change , auto IMEI change and generation

Automatically lock/open SIM card/ port according to its balance or alarm

Support Codec: G.711a/u law, G.723.1, G726,G.729AB

Support bandwidth optimization (optional)

Sys log output by USB interface for tracking records

User friendly web management interface

HTTP Web support for configuration and upgrade

SIM swapping

HTTP Web support ASR, ACD, PDD, SIM balance enquiry

Convert the number as preset rules /Number translation

Call routing / digit map

CDR management

IVR customized

BCCH management

SIM card rotation conditions:

1) According to accumulated call duration check (talk time)
2) According to accumulated idle&talking check(use time)
3) According to accumulated calls check (call counter)
4) According to consecutive call failure check(call failure)
5) According to consecutive low-duration calls check (Low duration)

Human behaviour conditions:

1) According to accumulated call duration check (talk time)
2) According to accumulated idle&talking check(use time)
3) According to accumulated calls check (call counter)

1.3 Specifications

Interfaces

● Mobile Ports: 16 ports GSM/CDMA channels

● Two(2) 10/100Mbps Ethernet Interface (2xRJ45)

● USB: 1 port

Voice Processing

● Voice Codec: G.711a/u law, G.723.1, G726,G.729AB

● QoS: Diff Serve, T oS, VAD, PLC, CNG

Call Features

● Calling Type: Terminate/Originate calls

● IVR Voice Prompt: Two stage dialing, Customized IVR

● Call handling: One stage dialing, Configurable dial plan, digit map

● DTMF: RFC2833, SIP

Mobile Features

● General Feature: SMS, USSD, IMEI/PIN modify, Call minutes

restriction, Carrier select, BCCH, Reversal Polarity Network

● Network Mode: NAT router or switch mode

● Network Protocols: IP,TCP, UDP,TFTP, FTP, RTP, RTCP, ARP, RARP,ICMP Ping, NTP, SNTP, HTTP, DNS, PPPoE, DHCP

● NAT traversal: Static NAT, STUN

Protocol

● Protocol: SIP V2.0 RFC3261

● SIP Characteristics: By port/device registration, Two183 mode
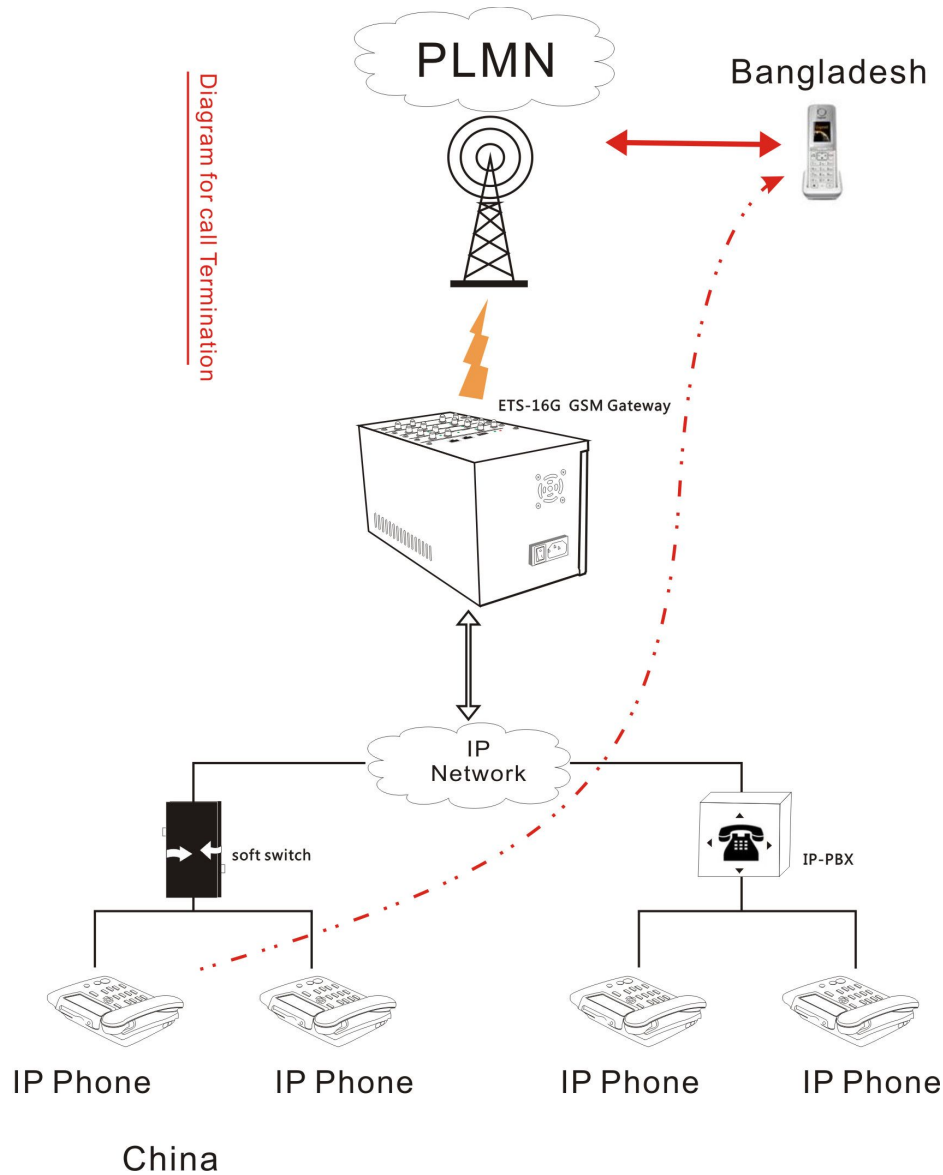
Configuration Management

● Management: TFTP, HTTP, Sys log, CDR

● Web GUI: Configuration, firmware upgrade, call status, CDR ,Configuration backup/restore

Hardware Specifications

● Power Supply:AC100~240V 50/60HZ DC12V/5A

● Temperature: 0~40 ℃（Operation）, -20~80 ℃（storage）

● Humidity: 5%～90% RH,

● Power Consumption: 35W

● Product Appearance: Rack mountable 1u chassis

● Product Dimensions: 44(W) x 28(D) x 6.8(H) cm

● Product Net weight: 5.0kg

● Carton box Dimensions: 52(W) x 32(D) x 13(H) mm

● Gross weight: 7.0kg

1.4 Application

VoIP call termination

eTROSS

SHENZHEN ETROSS TELECOM CO.,LTD.

1.5 Call traffic example

Port	Enable	Type	Trunk	Balance(min)	IMSI	IMEI	ASR	ACD	PDD	Status	Codec
1	on	Hotline	1	--	470021708062093	863070015094237	29.8%	6:32	8	Talking	G729
2	on	Hotline	1	--	470021709050071	343543654878763	17.1%	7:29	9	Talking	G729
3	on	Hotline	1	--	470021708062117	863070016465964	41.6%	8:38	7	Talking	G729
4	on	Hotline	1	--	470021709050371	863070016465972	31.8%	6:23	9	Talking	G729
5	on	Hotline	1	--	470021709050081	863070015092983	19.8%	6:47	10	Dialing	--
6	on	Hotline	1	--	470021709050243	863070015093015	20.8%	6:59	9	Talking	G729
7	on	Hotline	1	--	470021709050078	863070015215022	39.5%	5:45	7	Talking	G729
8	on	Hotline	1	--	470021708062094	863070015214983	34.7%	8:38	9	Talking	G729
9	on	Hotline	1	--	470021709050366	863070016304114	35.0%	7:25	7	Talking	G729
10	on	Hotline	1	--	470021709050378	863070016304957	54.3%	8:53	9	Talking	G729
11	on	Hotline	1	--	470021709050381	863070015094476	38.4%	6:15	8	Talking	G729
12	on	Hotline	1	--	470021709050235	863070015094245	12.7%	7:41	8	Talking	G729
13	on	Hotline	1	--	470021709050384	863070016901059	18.0%	8:47	9	Talking	G729
14	on	Hotline	1	--	470021709050245	863070016900820	31.8%	8:56	8	Talking	G729
15	on	Hotline	1	--	470021709050368	863070015211906	21.0%	8:5	7	Talking	G729
16	on	Hotline	1	--	470021709050241	863070015211880	40.0%	7:5	6	Talking	G729