GSM Gateway ETS-32x8G Data Sheet

1.1 Overview

GSM VoIP gateway ETS32x8G is newly designed IP to GSM gateway supporting maximum 32 ports 256SIMs 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 ETS32x8 features with new functions such as multi-SIM rotation, Human behavior, BTS rotation,proxy server encryption for anti IP block, ETS bandwidth optimization (SBO), 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.

1.2 Main features

Support 32 GSM ports, up to 32 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 Human behaviour function
Support SBO (Switch Bandwidth Optimization)
Support BTS rotation and lock
Support encryption for VOS for anti-block of IP port
Support SMS Sending / batch SMS Sending / receiving
Support USSD balance inquiry
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 behavior 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

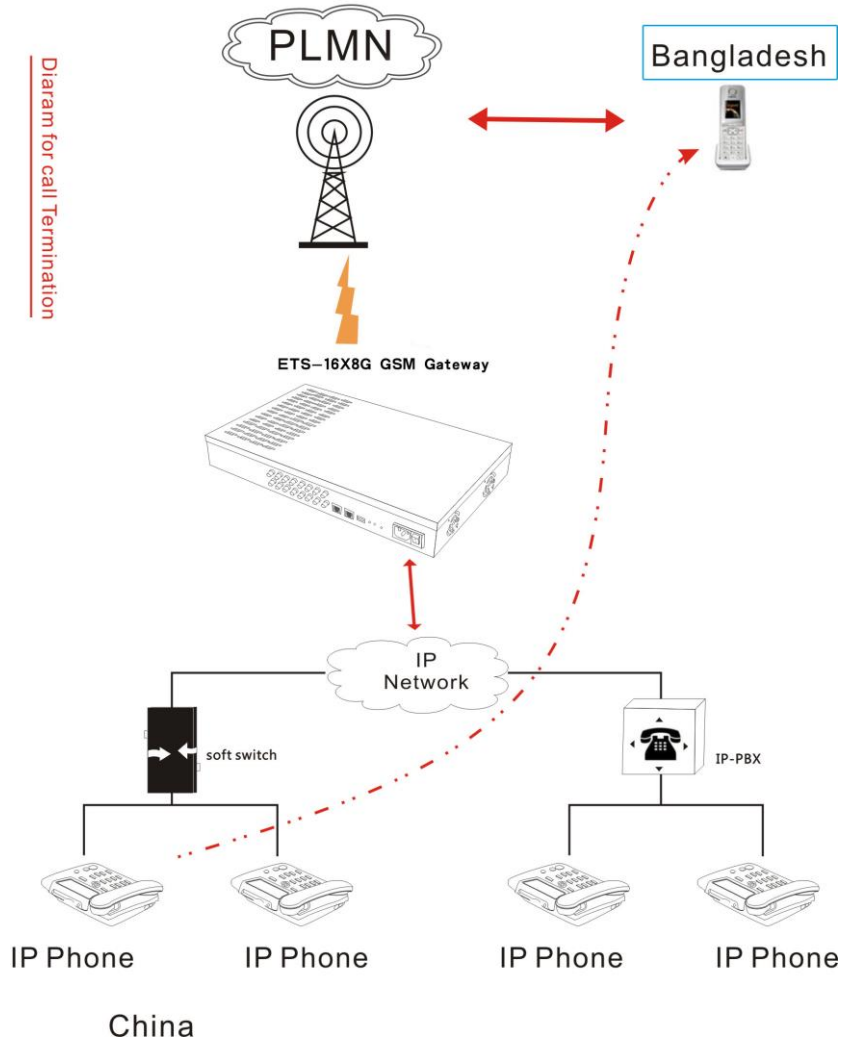
- Management: TFTP, HTTP, Sys log, CDR
- Web GUI: Configuration, firmware upgrade, call status, CDR ,Configuration backup/restore

Hardware Specifications

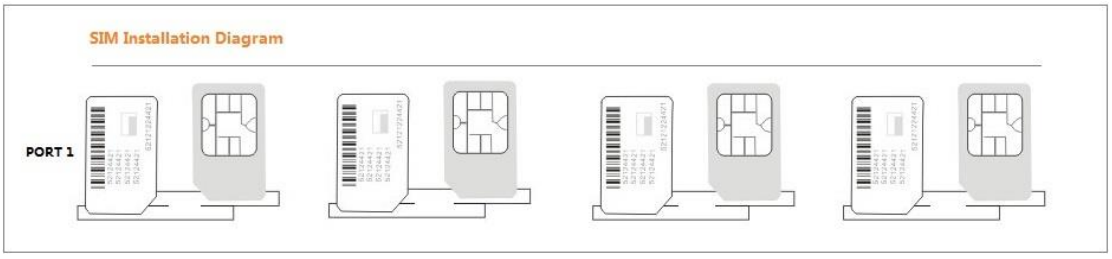
- Power Supply:AC100~240V 50/60HZ DC12V/5A
- Temperature: 0~40 ℃（Operation）, -20~80 ℃（storage）
- Humidity: 5%～90% RH,
- Power Consumption: 35W
- Product Appearance: Rack mountable 1u chassis
- Product Dimensions: 44(W) x 28(D) x 6.8(H) cm
- Product Net weight: 5.0kg
- Carton box Dimensions: 52(W) x 32(D) x 13(H) mm
- Gross weight: 7.0kg

1.4 Application

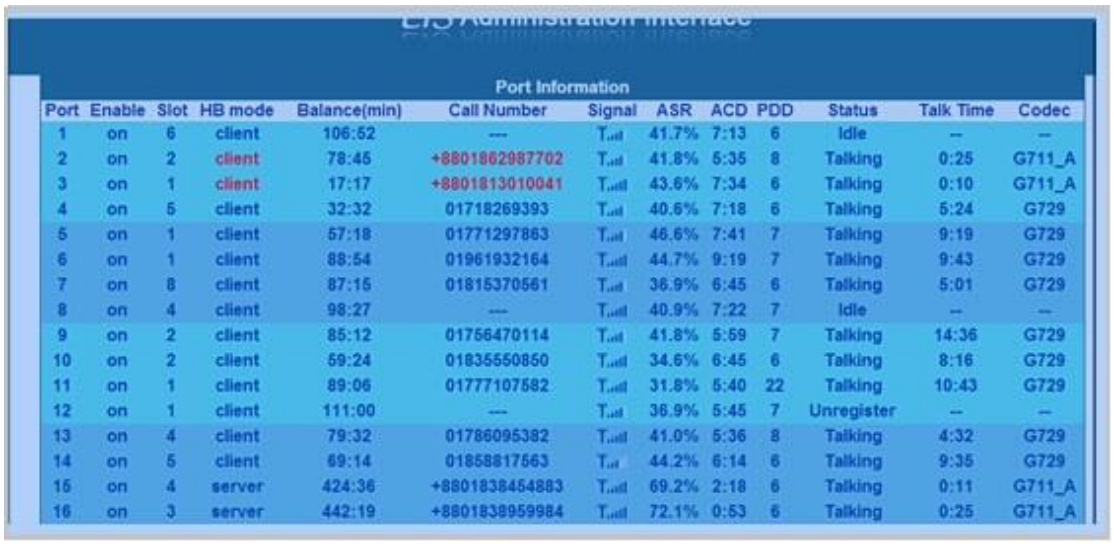
International VoIP call termination



1.5 SIM Card Installation Diagram

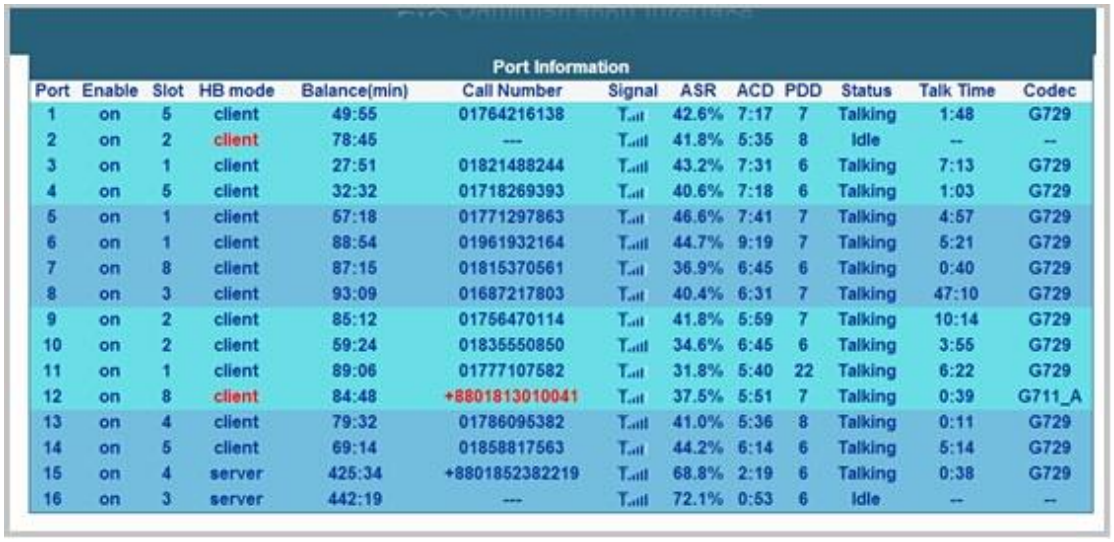


1.6 Call traffic examples



Port Information

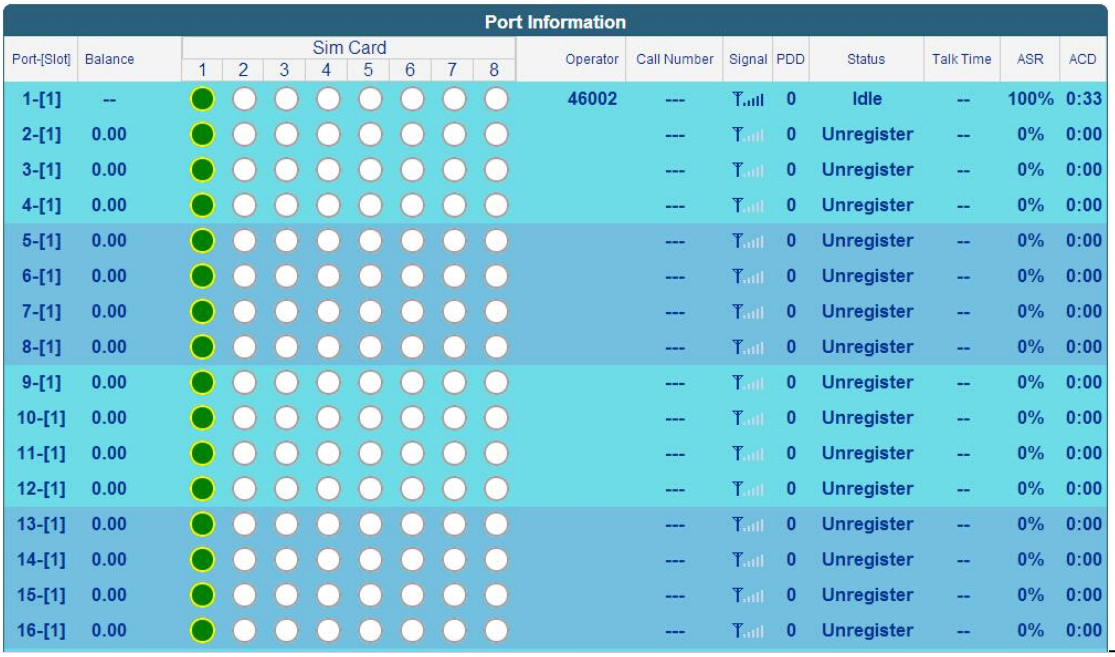
Port	Enable	Slot	HB mode	Balance(min)	Call Number	Signal	ASR	ACD	PDD	Status	Talk Time	Codec
1	on	6	client	106:52	---		41.7%	7:13	6	Idle	--	--
2	on	2	client	78:45	+8801862987702		41.8%	5:35	8	Talking	0:25	G711_A
3	on	1	client	17:17	+8801813010041		43.6%	7:34	6	Talking	0:10	G711_A
4	on	5	client	32:32	01718269393		40.6%	7:18	6	Talking	5:24	G729
5	on	1	client	57:18	01771297863		46.6%	7:41	7	Talking	9:19	G729
6	on	1	client	88:54	01961932164		44.7%	9:19	7	Talking	9:43	G729
7	on	8	client	87:15	01815370561		36.9%	6:45	6	Talking	5:01	G729
8	on	4	client	98:27	---		40.9%	7:22	7	Idle	--	--
9	on	2	client	85:12	01756470114		41.8%	5:59	7	Talking	14:36	G729
10	on	2	client	59:24	01835550850		34.6%	6:45	6	Talking	8:16	G729
11	on	1	client	89:06	01777107582		31.8%	5:40	22	Talking	10:43	G729
12	on	1	client	111:00	---		36.9%	5:45	7	Unregister	--	--
13	on	4	client	79:32	01786095382		41.0%	5:36	8	Talking	4:32	G729
14	on	5	client	69:14	01858817563		44.2%	6:14	6	Talking	9:35	G729
15	on	4	server	424:36	+8801838454883		69.2%	2:18	6	Talking	0:11	G711_A
16	on	3	server	442:19	+8801838959984		72.1%	0:53	6	Talking	0:25	G711_A



Port Information

Port	Enable	Slot	HB mode	Balance(min)	Call Number	Signal	ASR	ACD	PDD	Status	Talk Time	Codec
1	on	5	client	49:55	01764216138		42.6%	7:17	7	Talking	1:48	G729
2	on	2	client	78:45	---		41.8%	5:35	8	Idle	--	--
3	on	1	client	27:51	01821488244		43.2%	7:31	6	Talking	7:13	G729
4	on	5	client	32:32	01718269393		40.6%	7:18	6	Talking	1:03	G729
5	on	1	client	57:18	01771297863		46.6%	7:41	7	Talking	4:57	G729
6	on	1	client	88:54	01961932164		44.7%	9:19	7	Talking	5:21	G729
7	on	8	client	87:15	01815370561		36.9%	6:45	6	Talking	0:40	G729
8	on	3	client	93:09	01687217803		40.4%	6:31	7	Talking	47:10	G729
9	on	2	client	85:12	01756470114		41.8%	5:59	7	Talking	10:14	G729
10	on	2	client	59:24	01835550850		34.6%	6:45	6	Talking	3:55	G729
11	on	1	client	89:06	01777107582		31.8%	5:40	22	Talking	6:22	G729
12	on	8	client	84:48	+8801813010041		37.5%	5:51	7	Talking	0:39	G711_A
13	on	4	client	79:32	01786095382		41.0%	5:36	8	Talking	0:11	G729
14	on	5	client	69:14	01858817563		44.2%	6:14	6	Talking	5:14	G729
15	on	4	server	425:34	+8801852382219		68.8%	2:19	6	Talking	0:38	G729
16	on	3	server	442:19	---		72.1%	0:53	6	Idle	--	--

1.7 ETS Administration Interface Diagram



Port Information

Port-[Slot]	Balance	Sim Card 1	2	3	4	5	6	7	8	Operator	Call Number	Signal	PDD	Status	Talk Time	ASR	ACD
1-[1]	--									46002	---		0	Idle	--	100%	0:33
2-[1]	0.00										---		0	Unregister	--	0%	0:00
3-[1]	0.00										---		0	Unregister	--	0%	0:00
4-[1]	0.00										---		0	Unregister	--	0%	0:00
5-[1]	0.00										---		0	Unregister	--	0%	0:00
6-[1]	0.00										---		0	Unregister	--	0%	0:00
7-[1]	0.00										---		0	Unregister	--	0%	0:00
8-[1]	0.00										---		0	Unregister	--	0%	0:00
9-[1]	0.00										---		0	Unregister	--	0%	0:00
10-[1]	0.00										---		0	Unregister	--	0%	0:00
11-[1]	0.00										---		0	Unregister	--	0%	0:00
12-[1]	0.00										---		0	Unregister	--	0%	0:00
13-[1]	0.00										---		0	Unregister	--	0%	0:00
14-[1]	0.00										---		0	Unregister	--	0%	0:00
15-[1]	0.00										---		0	Unregister	--	0%	0:00
16-[1]	0.00										---		0	Unregister	--	0%	0:00

17-[1]	0.00										---		0	Unregister	--	0%	0:00
18-[1]	0.00										---		0	Unregister	--	0%	0:00
19-[1]	31.00									46002	---		0	Idle	--	0%	0:00
20-[1]	31.00									46002	---		0	Idle	--	0%	0:00
21-[1]	0.00										---		0	Unregister	--	0%	0:00
22-[1]	0.00										---		0	Unregister	--	0%	0:00
23-[1]	0.00										---		0	Unregister	--	0%	0:00
24-[1]	31.00									46002	---		0	Idle	--	0%	0:00
25-[1]	0.00										---		0	Unregister	--	0%	0:00
26-[1]	0.00										---		0	Unregister	--	0%	0:00
27-[1]	0.00										---		0	Unregister	--	0%	0:00
28-[1]	0.00										---		0	Unregister	--	0%	0:00
29-[1]	0.00										---		0	Unregister	--	0%	0:00
30-[1]	0.00										---		0	Unregister	--	0%	0:00
31-[1]	0.00										---		0	Unregister	--	0%	0:00
32-[1]	0.00										---		0	Unregister	--	0%	0:00

1.8 Photos