

# ETERNITY GE

## E1 GSM Gateways

The Matrix ETERNITY GE E1 Gateway enables a direct link between a telephone system and the mobile network. It provides a company with low cost office to mobile communications or basic telephone lines when a landline connection is not available.

Designed for high traffic users where multiple lines are required, the E1 Gateway replaces the need for multiple fixed wireless terminals.

The ETERNITY GE supports either E1/PRI or VoIP/SIP connectivity to a phone system.

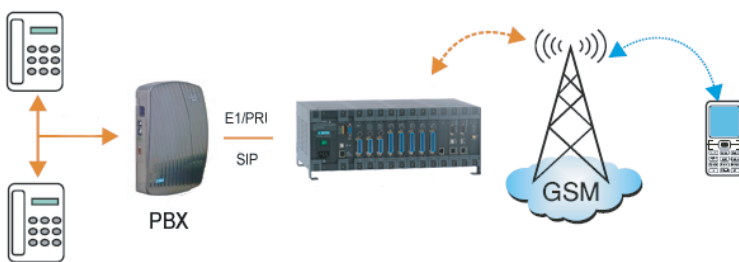
Complete with innovative management features such as call routing according to prefixes, timetables, number of calls, port hunting, grouping and a powerful detailed call logging facility.

These features allow the user to take advantage of the lowest mobile tariffs available.

Let Matrix ETERNITY GE add a competitive edge to your business by reducing telephone costs!



### ■ Applications of ETERNITY GE



### ■ ETERNITY GE Configuration



12S Chassis  
16-32 Channel Models



6S Chassis  
4-16 Channel Models

### ■ Features

- ▶ 4-32 Channel Models
- ▶ GSM 850/900/1800/1900
- ▶ Easy Installation
- ▶ PRI/E1 Connectivity
- ▶ VoIP/SIP Connectivity
- ▶ Intelligent LCR Software

# ETERNITY GE

## E1 GSM Gateways

### TECHNICAL SPECIFICATION

GSM Band (MHz)	: Quad Band: GSM 850, EGSM900, DCS1800, PCS1900
Compliant	: ETSI GSM Phase 2/2+
Sim Card	: One SIM per GSM Port
SIM Interface	: 1.8V, 3V
Transmission Power	: Class 4 (2W) at GSM850 and EGSM900 MHz bands : Class 1 (1W) at DCS1800 and PCS1900 MHz bands
RF Sensitivity	: Better than -106 dBm
External Antenna Port	: 2.5dBi, 50 ohms, SMA Male Connector
Speech Gain (Transmit and Recieve)	: Programmable

### GSM MODELS

Model	PRI Connection	GSM Channels	Chassis	Cards
<b>GE04</b>	1	4	6S	1 x DKP, 1 x E1, 1 x GSM4
<b>GE08</b>	1	8	6S	1 x DKP, 1 x E1, 2 x GSM4
<b>GE12</b>	1	12	6S	1 x DKP, 1 x E1, 3 x GSM4
<b>GE16</b>	1	16	6S	1 x DKP, 1 x E1, 4 x GSM4
<b>GE20</b>	1	20	12S	1 x DKP, 1 x E1, 5 x GSM4
<b>GE24</b>	1	24	12S	1 x DKP, 1 x E1, 6 x GSM4
<b>GE28</b>	1	28	12S	1 x DKP, 1 x E1, 7 x GSM4
<b>GE32</b>	1	32	12S	1 x DKP, 1 x E1, 8 x GSM4

### GSM / VoIP MODELS

Model	VoIP Channels	GSM Channels	Chassis	Cards
<b>GE04V</b>	8	4	6S	1 x DKP, 1 x VoIP, 1 x GSM4
<b>GE08V</b>	8	8	6S	1 x DKP, 1 x VoIP, 2 x GSM4
<b>GE12V</b>	16	12	6S	1 x DKP, 2 x VoIP, 3 x GSM4
<b>GE16V</b>	16	16	12S	1 x DKP, 2 x VoIP, 4 x GSM4
<b>GE20V</b>	24	20	12S	1 x DKP, 3 x VoIP, 5 x GSM4
<b>GE24V</b>	24	24	12S	1 x DKP, 3 x VoIP, 6 x GSM4
<b>GE28V</b>	32	28	12S	1 x DKP, 4 x VoIP, 7 x GSM4
<b>GE32V</b>	32	32	12S	1 x DKP, 4 x VoIP, 8 x GSM4

### PRI Trunks

Channels	: 23B+D and 30B+D
Personality	: Network (NT)* and Terminal (TE)
Signaling	: Euro ISDN ETSI DSS1 CTR4 (NET5), ITU-T Q.921, Q.931, US National ISDN-2, German 1TR6, France VNx, Australian TS-014, TS-038
Country Variants	: Europe, USA, Germany, France, UK, China, Australia, Hong Kong, Korea, Singapore
Protection	: Solid State (Over Voltage and Over Current), Built-in Secondary Protection
Supplementary Services	: Euro ISDN, US Nation ISDN
VoIP Protocols	: SIP v2, SDP, RTP, RFC 2833
Network Protocol	: IPv4, TCP, UDP, DHCP, STUN
SIP	: Maximum 32 SIP Accounts per System, Out Bound Proxy Support, Display Name, User Name, Password, URL, Proxy URL, Register URL, Register Interval
NAT/Firewall Support	: PPPoE
Voice Codecs	: G.711 (A-Law, $\mu$ -Law), G.723, G.729AB, GSM-FR, iLBC
Line Echo Cancellation	: G.168 with 64/128ms Tail Length
Call Progress Tones	: Dial, Ring Back Tone, Busy Tone, Error Tone
Voice	: Dynamic Jitter Buffer (Adaptive), Comfort Noise Generation and Voice Activity Detection
Fax	: T.38 and Pass Through
Data Network	: T.38 and Pass Through
Quality of Service	: Layer 3 DIFFServ and TOS

### Power Supply

Input	: (Mains): 90-265 VAC, 47-63 Hz
Power Consumption (Typical)	: EternityLite6S - 30 W, EternityLite12S - 50 W

### Mechanical

Dimensions (W x H x D)	: 6S - 26.0x14.2x24.4 cm 12S - 48.4x14.2x24.4 cm
Chassis Weight	: 6S - 3.5 kg 12S - 6.5 kg
Volumetric Weight	: 6S - 6.5 kg 12S - 9.5 kg
Installation	: 6S - Table Top 12S - Table Top, 19" Rack (Opt.)

### Environment

Operating Temperature	: -10°C to +50°C
Operating Humidity	: 5-95% RH, Non-Condensing
Storage Temperature	: -40°C to +85°C
Storage Humidity	: 0-95% RH, Non-Condensing