



ETERNITY

The New-Age Communication and Security System For Modern Apartments

In today's fast paced world, with the anonymity of urban living, weakening of social networks, and rising crimes rates, Communication and Security have emerged as two basic necessities.

Children, ladies and other occupants of any residential complex naturally need a communication system to help them keep in touch with their neighbors and share their day-to-day life with them regularly.

Security is another prime concern for all the urban inhabitants. It is imperative that they get a dependable product that allows them to summon help as fast as possible and whenever needed. Further, communication and security are interlinked and inseparable. This

necessitates a product that can understand and manage this duality Communication and Security.

Presenting Matrix Eternity - a new-generation Communication-Security System with a unique blend of communication, security and convenience functions.

Let Matrix Eternity with its new-age functions take care of your communication and security anxieties!





Meeting Communication and Security needs of modern residencies!

Communication: A Backbone for Happy Living

Communication is essential in strengthening social network and creating a happier neighborhood. Designed for easy usage, Matrix Eternity allows all extension users to talk to each other without incurring any cost. This allows children, housewives, elders and friends to communicate freely with each other in the same building or residential township. A very important feature to develop bonding among the residents.

Security: Need of the Hour

A good security system can improve the safety of a home and the loved ones residing in it. Research says that a home without an appropriate security about three times more likely to be broken into, than the one with security. Matrix Eternity offers a host of sophisticated security features which ensure a safe and secure surrounding. Features like Panic Switch, Central Ringer, Security Dialer, and Emergency Calls help safeguard the residents not only from intruders but also from natural accident like fire.

Matrix Eternity is available in five variants:

- (i) Eternity GE3S
- (ii) Eternity GE6S
- (iii) Eternity GE12S
- (iv) Eternity ME10S
- (v) Eternity ME16S

Matrix Eternity offers you superlative quality, robust architecture and intelligent software for efficient, reliable and maintenance-free communication. Powered by a 32-bit RISC processor and distributed processing, the system ensures immediate response. Its 100% non-blocking PCM-TDM design ensures unrestricted communication simultaneously by all the users. It also offers flexible scalability due to its modular design of the cards.



ETERNITY GE3S



ETERNITY GE6S



ETERNITY GE12S



ETERNITY ME10S



ETERNITY ME16S

COMMUNICATION FEATURES



Minimal Cost of Phone Calls: Boon for Ladies and Teenagers

We all know that ladies and teenagers love to talk on phones for long time. Now, they all can talk to their hearts content without stepping out of their homes. Matrix Eternity LCR features is facilitate to make calls at minimal cost

Superior Speech Quality and Longer Extension Lines with SLIC:

Obsolete communication products use transformer based, single-ended, discrete circuitry for extension lines. These circuits are bulky, consume more power, pick-up noise and are prone to frequent failures.

On the other hand, the Matrix Eternity employs latest Digital Signal Processor (DSP) based Subscriber Loop Interface Circuit (SLIC) for extension interfaces. This design offers longer distance and multi-pair cabling for extensions reducing initial cost. Because the extension feed is balanced, cross-talk and radio interference are eliminated.

Calling Line Identification Presentation (CLIP) - Number and Name Display

Matrix Eternity offers CLIP that allows the user to see the phone number of the caller. In addition, it also shows the name of the caller (same exchange) making identification very easy. This is a very useful feature before deciding to answer a ringing call. The feature comes handy in tracking unwanted, nasty calls.



SECURITY FEATURES



Security Extension

Security person is responsible for screening visitors before allowing them entry into the premises. Two types of phones can be given to the security person Normal Phone or Digital Key Phone (DKP). Both the options support all the standard user features. Additional features supported by the DKP are Single-Touch Calling, Directory Dialing, Easy Call Management, etc.

Hunting Group for Security

If higher traffic is expected on the security station, he can be given two or more phones. These extensions can be put in a single logical group with a common hunting number. The residents can dial this common hunting number. The Eternity hunts for the free security extension and rings it immediately saving valuable time and improving response time. This feature is also useful when there are multiple security personnel stationed at different gates.

Digital 100% Non-Blocking Free-Flowing Communication

Many of the outdated communication products have limited call handling capacity. Their analog technology and limited hardware resources restrict the total number of simultaneous calls to a small fraction of the total users. This limitation becomes a serious bottleneck during peak hours and emergency situations.

Matrix Eternity is based on Digital Switching Technology and thus 100% non-blocking. Not only it supports all 100% users to talk simultaneously, but it also allows all the users to dial at the same time.

Flexible Numbering Plan:

The phone numbers are always expected to match the apartment numbers for natural association. The Matrix Eternity offers completely flexible numbering plan. It is also possible to mix 2, 3 and 4 digit numbers thus offering complete numbering flexibility. For example, few security and service extensions can be given single-digit numbers for quick access.

Communication with the Outside World:

Many a times, it is desirable that the building communication system should be connected with the external world using a single or a few telephone lines. This offers much-needed connectivity for the residents to talk to the security personnel from their offices. Even the security personnel can contact building members for some urgent matters. As local calls are not costly, installing a local line with the system would not add significantly to the total cost.

The Matrix Eternity offers this connectivity by adding appropriate card to the system. Even GSM card is also supported so that users can avail zero-cost benefit of the CUG facility offered by many GSM operators. It is possible to allow only a few stations to use the external line for local or long distance calls thus allowing total control and flexibility.

Malicious Call Tracing using Last Call Recall

The Matrix Eternity is designed keeping in mind the problems associated with modern living in apartments. If a user receives an obnoxious or unwanted call, he or she can place the call back to the caller by using Last Call Recall feature. This feature works irrespective of whether the call was answered or not.

Conversation and Speech Recording

The Matrix Eternity can be installed with optional Voice Mail Card to offer the facility of recording user's telephonic conversation in his personal voice mail box. This helps the user to keep record of the talks with various dialed or received calls. It is also possible to record all the calls of a few selected users automatically. Caution: The feature must be used in accordance with the local laws.

Emergency Call Detection and Reporting

Matrix Eternity allows the user to dial predetermined emergency numbers. Whenever these special numbers are dialed any user, the system alerts the security to provide timely help to the caller.

Malicious Call Tracing using Call Log

The Matrix Eternity maintains a log of all the calls made by the residents in its memory. Each call is stored with details like caller and called numbers, date, time, duration of call, etc. Entries in the log come handy in tracing malicious or obnoxious calls.



Panic Switch for Each Apartment: Emergency Call

Sometimes it is desirable that few or all apartments are provided their own panic switches. This helps aged people to summon help by just pressing the panic switch provided next to their bed or sofa. They need not remember and spend time in dialing specific numbers.

For such applications, a regular extension line can directly be wired to a panic switch. Whenever this switch is operated, the Eternity places a call to the prefixed station (generally, security) with caller number and name displayed on the security phone to identify the caller.

If you do not desire to spare one extra extension line for each panic switch, you can still avail this feature with little variation in usage. The panic switch and the phone can be connected on the same extension line in parallel. In such a case, the user has to press the panic switch for a longer time (about 5 to 7 seconds) for the Eternity to differentiate between a normal phone pickup for dialing and sustained off-hook condition to trigger an emergency call.

Digital Output Port (DOP): Central Hooter or Ringer

It is desirable that one central alarm annunciation device is installed for the entire building. The Matrix Eternity offers a port with Normally Open (NO) contact for this purpose. Any single-phase or three-phase contactor can be activated using this contact which in turn can control any central annunciation device.

As mentioned above, Panic Switch or Sensor can activate this central device. Alternately, a user can dial a prefixed code from his phone in case of an emergency to alert people and summon help.

Security Station Monitor

If the security is provided with a Digital Key Phone (DKP), it is possible to monitor his activities by secretly listening to him once in a while. A user can dial a code to activate DKP speakerphone mic allowing the user to listen to what is being talked in the security room. Caution: The feature must be used in accordance with the local laws.



Digital Input Port for a Central Panic Switch or a Sensor

Need for immediate help in case of an emergency is imperative in apartments. The Matrix Eternity facilitates one common panic switch interface. If any user presses this switch, the Eternity places an emergency call on the security station and thus alerting the personnel. It can also activate a central ringer or hooter if the application demands alerting all the residents of the building. It is possible to wire multiple panic switches or sensors in parallel to this port thus allowing residents to operate the switch that is closest to them at the time of an emergency. It is also possible to place a call on a prefixed station automatically whenever the panic switch or sensor is activated.



■ CONVENIENCE FEATURES

Alarms Wakeup and Reminder Rings

Matrix Eternity offers facility of setting up multiple wake-up alarms from the same extension. In addition, it also supports reminder alarm that can be set for a desired day, date and time. All these alarms support snooze facility ensuring that the user has really woken up. In addition, the system can also greet the users with a sweet voice message "Good Morning! This is your wakeup call!" or something similar.

Auto Call Back

This feature allows the user to receive a ring back from a number which was engaged or not responding when dialed earlier. The user saves time and efforts of trying the same number repeatedly.

Background Music: Soft, Soothing Music in the Entire Complex

Matrix Eternity allows the users to listen to background music on their DKP or normal speaker phones. If an incoming call is received while a user is listening to the music, it changes to ring-back tone. This reduces the cost of extra wiring and speakers. Four types of music tones are built into the system. The user can also use external music sources like MP3 player.

Music Input Port

The Analog Input Port (AIP) allows an external music source (FM radio or MP3 player) to be connected to Matrix Eternity. The desired music or jingle can be played while a person is kept on hold. The system allows you to use the Digital Key Phone (DKP) as well as the single line telephone (SLT) as a device to play soft background music without hampering normal calls. Let the callers listen to the music of your choice!

Public Address System Port

Matrix Eternity supports the Public Address System which can be connected to the Analog Output Port (AOP). It allows any station user to make announcements on external speakers. It is a very helpful in making important announcement in public areas of residential complexes.

Conference 3-Party and Multi-Party

Matrix Eternity models allows up to 15(GE)/21 (ME) people to converse in a single conference. The unique design of this feature also allows multiple conferences to be conducted simultaneously. You can held meetings and group discussions over phone to save valuable time.

Voice Messages

Matrix Eternity has built-in voice modules. The user can use these modules for various voice applications like Station Greetings, Reminders, Security Dialer, Message Wait, Alarm, Help and Music-on-Hold.

Voice Prompts for Tones

Matrix Eternity offers this unique feature of using Voice Prompts in place of the regular tones to guide users at various stages of a call. The prompts like "The dialed number is ringing" for Ringing Tone and "The dialed number is busy, please hold" for Engage Tone can be recorded in any language. These prompts also guides the user about the current status of the call or next course of action the user needs to take. For example, if a user dials an extension and the extension is busy, a message like "The dialed extension is busy, please dial 2 for auto call back" can be played. This is an extremely user-friendly feature that offers a world of convenience to the users.

■ VALUE ADDED FEATURES

Expandability

All models of Matrix Eternity are expandable and allow the user to add extra cards to increase the number of stations to meet higher capacity requirements in future. From 8 users to 512 users can be accommodated in a single system. For higher capacities, multiple systems can be networked over T1/E1/PRI Lines.

Networking of Multiple Eternities

Many a large residential complexes have multiple apartment buildings. If a single Matrix Eternity cannot match the required number of stations, it is possible to install separate Matrix Eternity for each building. These can in turn be connected to each other to form a network. Matrix Eternity facilitates networking over T1 (1.544Mbps) or E1 (2Mbps) digital links using optional cards. Such a network allows the users of different building to talk to each other seamlessly.

Digital Key Phones

Matrix Eternity offers Digital Key Phone ports through a 2-wire, full-duplex Digital Subscriber Network Interface Circuit. It facilitates easy and fast access to many value-added functions supported by the system. Many variant and colors of DKP are offered.

Useful Tips for Home Security

- Write your name and house number clearly outside your home to help the police and any emergency services to locate your home during an emergency.
- Cultivate the best personal safety routines like checking the locks of all doors and windows before sleeping.
- If your home is surrounded by trees and shrubs, you can trim them periodically so that the perimeters of the house are clearly visible.



ETERNITY FEATURES LIST

- Abbreviated Dialing (Global & Personal)
- Abbreviated Dialing (Free)
- Access Codes (Programmable)
- Account Codes
- Account Codes (Forced)
- Alarms (Time, Daily, Future Date & Time)
- Alarm-Snooze
- Alarm-Multiple
- Allowed and Denied Lists
- Alternate Number Dialing
- Analog Input Port
- Analog Output Port
- Auto Attendant (Multiple Languages)
- Auto Call Back (Busy, No Reply)
- Auto Redial
- Automated Control Applications
- Background Music (DKP, SLT)
- Barge-In
- Behind the PBX Applications
- Boss Ring
- Call Accounting System (CAS) Interface
- Call Budget
- Call Cost Calculation
- Call Duration Control
- Call Follow Me
- Call Forward (Busy, No Reply, Dual Ring Busy or No Reply, to external number)
- Call Forward (Remote)
- Call Park (General and Personal Orbit)
- Call Pick Up (Group and Selective)
- Call Progress Tones
- Call Splitting
- Call Taping
- Call Transfer (Screened, On Busy, While Ringing, Trunk to Trunk)
- Calling Line Identification and Presentation (CLIP)
- Calling Line Identity Restriction (CLIR)
- Calling Line Identification-Station (DKP and SLT)
- Calling Line Identification-Trunk (Analog, ISDN, T1/E1, GSM, VoIP)
- Central Ringer
- Class of Service (CoS)
- Closed User Group
- CLI based Routing
- Closed User Group (With/ Without Exchange ID)
- Conference-3 Party
- Conference-15/21 Party
- Conference Dial-in
- Conference-Multiple
- Conflict Dialing
- Continued Dialing
- Conversation Recording
- Customer Emergency Services
- Identification Dialing
- Customer Name
- Date and Time Format
- Daylight Saving Time
- Department Call
- Digital Input Port
- Digital Output Port
- Direct Inward Dialing (DID)
- Direct Inward System Access (DISA)
- Direct Outward System Access (DOSA)
- Distinctive Rings
- Do Not Disturb (DND)
- Do Not Disturb (Remote)
- Dynamic Lock (Auto and Manual)
- E&M Connectivity
- Emergency Call Detection and Reporting
- Emergency Dialing
- External Call
- External Music Port
- Field Programmable (Onsite up-gradation)
- Flash Timer
- Flexible Clock Synchronization
- Flexible Numbers
- Forced Call Disconnection
- GPAX Applications
- GSM Signal Strength
- Helpdesk
- Hold
- Hot Desking
- Hotline (Immediate and With Delay)
- Hot Outward Dialing (With/Without Number, With/Without Delay)
- Hotel-Motel Features
- Incoming Call Management
- Internal Call
- Internal Call Restriction
- Interrupt Request
- ISDN-BRI Connectivity
- ISDN-PRI Connectivity

- Last Caller Recall
- Last Number Redial
- Least Cost Routing (Number, Time, Combination of Time + Number, Carrier Pre-Selection and Service Provider to Service Provider)
- Live Call Screening
- Live Call Supervision
- Magneto Trunk Connectivity*
- Master Time Zone
- Maturity (12 KHz/16 KHz, Delay, CPD, Polarity Reversal, Connect)
- Meet Me Paging
- Message Wait
- Mobile Ports (GSM)
- Mobile Rx Strength on DKP Display
- Music on Hold
- Name Programming (Station, Trunk)
- Operator (Single, Multiple)
- Override
- Paging (Internal and External)
- PLCC Applications
- PMS Interface
- Priority (Intercom and Trunk)
- Privacy
- Programmable Access Codes
- Programmable Call Progress Tones & Rings
- Programming the System (Using SLT, DKP, Ethernet Port, Serial Port, Jeeves)
- Public Address System Port
- Quick Dial
- Raid
- Real Time Clock
- Real Time Clock Synchronization
- Region Code
- Remote Alarm
- Remote Call Forward
- Remote Programming
- RS232C Port
- Security Dialing and Reporting
- Selective Trunk Access
- Self Ring Test
- Station Groups
- Station In-Service/Out-Service
- Station Message Detail Recording (SMDR) (Incoming, Outgoing, Internal)
- System Activity Log and Display
- System Debug
- System Fault Log and Display
- System Administrator (SA) Mode
- System Security (Passwords)
- Time Tables
- Toll Control
- Trunk Access Groups
- Trunk Auto Answer
- Trunk Connectivity (BRI)
- Trunk Connectivity (E&M)
- Trunk Connectivity (E1)
- Trunk Connectivity (GSM)
- Trunk Connectivity (PRI)
- Trunk Connectivity (T1)
- Trunk Connectivity (VoIP)
- Trunk Landing Groups
- Trunk Parameters
- Trunk Reservation
- Upgrading the Software
- User Security (Password)
- Virtual Stations
- Voice Help
- Voice Mail Integration
- Voice Message Applications
- Voice Prompts for Tones
- Walk-in Class of Service
- Web based Programming

COMPLIANCES

EMI/EMC	Conducted Emission	: CISPR 22
	Radiated Emission	: CISPR 22
	Harmonic Current Emission	: IEC 61000-3-2
	Voltage Flicker	: IEC 61000-3-3
	Electro-static Discharge	: IEC 61000-4-2
	Radiated Susceptibility	: IEC 61000-4-3
	Electrical Fast Transient	: IEC 61000-4-4
	Surge	: IEC 61000-4-5
	Conducted Immunity	: IEC 61000-4-6
	Power Frequency Magnetic Field	: IEC 61000-4-8
	Voltage Interruption and Dips	: IEC 61000-4-11
FCC	Conducted Emission:	FCC Part 15 Sub Part B
	Radiated Emission:	FCC Part 15 Sub Part B
EC Directives	R&TTE 1999/5/EC, LVD 73/23/EEC, EMC 89/336/EEC	
Safety	IEC 60950: 2001 First Edition	

ETERNITY TECHNICAL SPECIFICATIONS

TECHNOLOGY

Type of Switching	: PCM/TDM Digital Switching (100% Non-blocking)
Processor	: 32-bit RISC
Architecture	: Distributed Processing
Slots	: Universal

SLT (ANALOG STATION)

Signaling	: Loop start
Dialing	: DTMF and Pulse (10/20PPS)
Off Hook AC impedance	: 600/900/Complex
Off Hook Current	: 39mA max
Loop Limit	: 1800Ω Max (Excluding Telephone)
On-Hook Voltage (Tip/Ring)	: -48V nominal
DTMF detection	: ITU-T Q.24
Return Loss	: >18dB
Longitudinal Balance	: >50dB
Transmission level adjust	: Tx Gain: -3dB to +6dB, Rx Gain: -3dB to 6dB
Ringing	: Trapezoidal 60VRMS/25Hz and Sinusoidal 52VRMS/25Hz
REN	: 3
CLI Presentation	: DTMF, FSK ITU-T V.23 and FSK Bellcore 202
Protection	: Over Voltage Secondary Protection
Physical Connector	: RJ45

DKP (DIGITAL STATION)

Signaling	: Proprietary Digital (2B+D)
Interface	: Single pair for Speech, Signaling and Power
Loop Limit	: 100Ω
Speech level	: Adjustable Tx and Rx Gain for Handset and Hands-free
Protection	: Over Voltage Secondary Protection
Physical Connector	: RJ45

TWT (2-WIRE TRUNK)

Signaling	: Loop Start
Loop Limit	: 12000
Off Hook AC Impedance	: 600/900/Complex
Pulse Dialing	: 10/20 PPS
DTMF Dialing and Reception	: ITU-T Q.23 & Q.24
Return Loss	: >18dB
Longitudinal Balance	: >50dB
Transmission level adjust	: Tx Gain: -15dB to +10dB, Rx Gain: -15dB to +10dB
CLI Reception	: DTMF, FSK ITU-T V.23 and FSK Bellcore 202
Call Maturity	: Delay and Polarity Reversal
Protection	: Over Voltage and Over Current Secondary Protection
Physical Connector	: RJ45

ISDN BRI

Channels	: 2B+D
Personality	: Network (NT) and Terminal (TE)
Switch Variant	: AT&T 4ESS, DMS-100, ETSI NET3, ITU-T Q.921, ITU-T Q.931, NTT INS64, US Ni1 (National ISDN 1), France Vnx
Protection	: Solid State (Over Voltage and Over Current) Built-in Secondary Protection
Physical Connector	: RJ48 (120 Ω)

ISDN PRI

Channels	: 23B+D and 30B+D
Personality	: Network (NT) and Terminal (TE)
Line Coding	: AMI/B8ZS for T1 and HDB3 for E1
Framing	: ESF for T1 and CEPT1 (with/without CRC) for E1
Switch Variant	: AT&T 4ESS, AT&T 5ESS, DMS-100, ETSI NET5, ITU-T Q.921, ITU-T Q.931, NTT INS64, US NI2(National ISDN 2), QSIC ECMA, France VN
Protection	: Solid State (Over Voltage and Over Current) Built-in Secondary Protection
Physical Connector	: RJ45
Supplementary Services	: QSIG ECMA

E1 CAS

Bit Rate	: 2048 kbps +/- 50 ppm
Line Coding	: HDB3
Framing	: CEPT1 (with/without CRC) with CAS MF
Line Signaling	: ITU-T Q.400 – Q.490
Register Signaling	: MFC-R2
Alarms	: L431, G.732, ETSI 300-233
Protection	: Solid State (Over Voltage and Over Current) built-in Secondary Protection
Physical Connector	: RJ48 (120 Ω)

T1 RBS

Bit Rate	: 1544 kbps +/- 50 ppm
Line Coding	: AMI and B8ZS
Line Signaling	: FXS Loop Start, FXO Loop Start, FXS Ground Start, FXO Ground Start, E&M (Immediate, Wink Start, Wink Start FGD)
Framing	: D4, ESF
Digit Dialing	: DTMF
Alarms	: ANSI T1.231
Performance	: ANSI T1.403, ANSI T1.231, AT&T TR54016
Physical Connector	: RJ48 (120 Ω)
Protection	: Solid State (Over Voltage and Over Current) built-in Secondary Protection

GSM

GSM Band (MHz)	: Quad-band: GSM850, EGSM900, DCS1800, PCS1900
Compliant	: ETSI GSM Phase2/2+
SIM Card	: One SIM per GSM Port
SIM Interface	: 1.8V, 3V
Transmission Power	: Class 4 (2W) at GSM850 MHz and EGSM900 MHz band Class 1 (1W) at DCS1800 MHz and PCS1900 MHz band
RF Sensitivity	: Better than -106dBm
Protocol	: At Command Interface
External Antenna	: One Antenna per 4 GSM Ports, 3.0 dBi, 50Ω SMA (Male) Connector, Omni Directional with Cable of 3 Meters Length

E&M

Type	: Type IV and Type V
Signaling	: Pulse 10 PPS, Pulse 20 PPS and DTMF
Signaling Protocol	: Normal, Delay, Wink, CCS Signals
Speech Interface	: 2-Wire and 4-Wire

VoIP

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, μ-Law), G.723, G.729AB, GSM-FR, iLBC
Line Echo Cancellation	: G.168 with 64/128ms Tail Length
Call Progress Tones	: Dial Tone, 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	: Ethernet (RJ45) Port, Auto MDIX (10/100 BaseT)
Quality of Service	: Layer 3 Diffserv and TOS
LED Indications	: 1-LED for System Status and 1-LED for Registrar Status

AUXILIARY PORTS

Analog Input Port	: 0.7 Vrms, Isolated, Push-Type Connector
Analog Output Port	: 0.7 Vrms, Isolated, Push-Type Connector
Digital Input Port	: Loop Sensing-Open/Close, 5 mA, Push-Type Connector
Digital Output Port	: VDC Max = 60 V DC, IDC Max = 0.15 A, Push-Type Connector

POWER SUPPLY

Input	: Option 1 (Mains): 90-265 VAC, 47-63 Hz Option 2 (DC): 48 VDC +/- 20%
Power Consumption (Typical)	: Eternity GE3S: 25W, Eternity GE6S: 30W Eternity GE12S: 50W, Eternity ME10S: 70W Eternity ME16S: 100W

INSTALLATION

Eternity GE3S	- Wall Mount, Table Top
Eternity GE6S	- Wall Mount, Table Top
Eternity GE12S	- Wall Mount, Table Top, 19" Rack (Optional)
Eternity ME10S	- Wall Mount, Table Top, 19" Rack (Optional)
Eternity ME16S	- Wall Mount, Table Top

ENVIRONMENT

Operating Temperature	: -10°C to +50°C (+14°F to +122°F)
Operating Humidity	: 5-95% RH, Non-Condensing
Storage Temperature	: -40°C to +85°C (-40°F to +185°F)
Storage Humidity	: 0-95% RH, Non-Condensing

MECHANICAL

Dimensions (WxHxD)

Eternity GE3S	- 18x14x25.4 cm (7.04"x5.51"x10")
Eternity GE6S	- 26x16x25.4 cm (10.24"x6.29"x10")
Eternity GE12S	- 41.2x16x25.4 cm (16.22"x 6.29"x10")
Eternity ME10S	- 48.2x33.0x39.9 cm (19.0"x12.9"x15.55")
Eternity ME16S	- 52.3x33.0x39.9 cm (20.5"x12.9"x15.55")

Unit Weight

Eternity GE3S	- 1.5 kg (3.3 lbs)
Eternity GE6S	- 3.5 kg (7.7 lbs)
Eternity GE12S	- 6.5 kg (14.3 lbs)
Eternity ME10S	- 8.3 kg (18.3 lbs)
Eternity ME16S	- 10.5 kg (23.1 lbs)

Shipping Weight

Eternity GE3S	- 4.5 kg (9.9 lbs)
Eternity GE6S	- 6.5 kg (14.3 lbs)
Eternity GE12S	- 9.5 kg (20.9 lbs)
Eternity ME10S	- 12.3 kg (27.1 lbs)
Eternity ME16S	- 15.0 kg (33.0 lbs)

SYSTEM RESOURCES

System Resources	Description	Maximum Capacity				
		GE3S	GE6S	GE12S	ME10S	ME16S
Universal Slots	The Maximum Physical Card Slots	3	6	12	10	16
Total User Ports	The Maximum Physical Ports Available	60	120	240	324	516

OPTIONAL INTERFACE

System Resources	Description	Maximum Ports				
		GE3S	GE6S	GE12S	ME10S	ME16S
SLT Ports	To Connect Single Line Analog Telephones	60	120	240	320	512
DKP/DSS Ports	To Connect Proprietary Digital Key Phones or DSS Consoles	48	80	80	80/128*	80/128*
TWT Ports	To Connect Two Wire CO Lines	48	96	128	128	128
E&M Ports	To Connect E&M Network	12	24	48	80	128
GSM Ports	To Connect to GSM Network	12	24	32	16/32*	16/32*
Magneto Trunk Ports	To Connect Magneto Phones	NA	NA	NA	80	128
BRI Ports	To Connect to ISDN BRI Network or ISDN Compatible Devices	12	24	32	32	32
T1/E1/PRI Ports	To Connect to T1 or E1 or PRI Network or Compatible Devices	3	6	8	8	8
VoIP Channels	To Make VoIP (SIP) Calls Using Internet or Intranet	24	48	96	80	128
Voice Mail System	To Configure as Voice Mail System	1	1	1	1	1
Redundancy	To Provide Redundancy in Case of Primary Hardware Failure	NA	NA	NA	Available for Master Card, Switch Card and PS48VDC	NA

*with 450W PS48VDC

BUILT-IN INTERFACES

System Resources	Description	GE3S	GE6S	GE12S	ME10S	ME16S
DKP/DSS Port	To Connect Proprietary Digital Key Phone or DSS Consoles	–	–	–	4	4
RS232C Port	To Connect to a Computer for SMDR Output	1	1	1	2	2
Parallel Printer Port	To Connect to a Parallel Printer	–	–	–	1	1
Analog Input Port	To Connect External Music Device	1	1	1	1	1
Analog Output Port	To Connect to a Public Address System	1	1	1	1	1
Digital Input Port	To Connect to Sensor or Panic Switch	1	1	1	1	1
Digital Output Port	To Connect to External Devices like Door Lock or Relay Port	1	1	1	1	1
Ethernet Port	To Access Web Based Programming Tool "Jeeves"	1	1	1	1	1
USB Port	Reserved for Future Application	1	1	1	1	1
Voice Modules	To Configure as Auto Attendant and/or for Recording Voice Messages to be used in other Voice Message Applications	8	8	8	16	16
Conference	Maximum No. of Simultaneous 3-party Conference	5	5	5	7	7



ABOUT MATRIX

An ISO 9001 Company, Matrix is a leader in the VoIP, GSM, Key Phone System and PBX market. An innovative, technology driven and customer focused organization; the company is committed to keep pace with revolutions in the telecom industry. This has resulted in bringing forth cutting edge products like Digital and ISDN Key Phone Systems, Voice Messaging Products, GSM Gateways, VoIP Gateways, VoIP PBXs, Intercom Security Products and PLCC Switches. With over 1,500,000 line units installed and growing by over 1500 line units per day, the installed base of Matrix connects over 15,000,000 calls everyday. Thus, Matrix has gained the trust and admiration of users representing the entire spectrum of industries. Matrix has won many awards for its innovative products.



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Due to continuous technology upgradations, product specifications are subject to change without notice.