



MEDIA GATEWAYS

Extend PBX Capabilities

The communication requirement of any growing enterprise changes as they expand their footprints to cater diverse range of customers. One of the major challenges an enterprise faces during the transformation of its communications infrastructure is to maintain the legacy equipment, owing to high initial investment. For an enterprise it is not an economically wise decision to discard their legacy equipment and invest in new technology. Therefore, in any growing enterprise, scalable solutions are an essential aspect for its constantly changing communication infrastructure.

Matrix presents, Fixed and Universal Media Gateways that enable enterprises to smartly augment their communication capabilities by integrating Media Gateways into their current PBX system without changing dialing habits. Matrix VoIP and GSM Gateways act as a bridge between an existing PBX system and various trunking protocols like GSM/3G, ISDN PRI, SIP and FXO-FXS, which saves additional investment on acquiring new equipment. The Matrix VoIP Gateways enable existing PBX to leverage benefits of IP network and efficiently control telephone bills. The Matrix GSM Gateways act as an extension for PBX that lacks GSM trunk, which reduces communication costs. Matrix Gateway solutions empowers enterprise growth by offering connectivity convenience to new age networks and investment protection on existing PBX.

- Universal Media Gateways
- VoIP Gateways
- GSM/3G Gateways
- GSM/3G FCTs

MATRIX GATEWAYS PRODUCT RANGE

Matrix serves diverse customer needs with its comprehensive range of Universal Media Gateways, Fixed Gateways and Scalable Gateways. Matrix delivers cutting edge technology products which are packed with features and functionalities. The products are in-hand with the latest technological developments and are designed to serve customer needs faster and longer. Matrix Gateways seamlessly

integrate traditional telephony interfaces to the varied networks and help lower day-to-day communication cost. The Gateways are ideal for corporate offices, factories, sales organizations, call centers, branch offices, public call offices, remote project sites and residences.

GATEWAY PRODUCT RANGE

UNIVERSAL MEDIA GATEWAYS	
ETERNITY LENX	High Density Universal Media Gateway
ETERNITY MENX	High Density Universal Media Gateway
SARVAM UMG	Medium Density Universal Media Gateway

VoIP GATEWAYS	
SETU VFX	VoIP-FXO-FXS Gateways
SETU VFXTH	VoIP-FXO-FXS Gateways
SETU VG	VoIP-GSM/3G-FXO-FXS Gateways
SETU VTEP	VoIP-T1/E1 PRI Gateway

GSM/3G FCTs	
SIMADO GFX11	GSM/3G Fixed Cellular Terminal for Voice Applications
SIMADO GFX11E	GSM/3G Fixed Cellular Terminal for Elevator Emergency Applications

GSM/3G GATEWAYS	
SIMADO GFX44	GSM/3G-FXS Gateway

BUSINESS COMMUNICATION SYSTEMS

UC SERVERS	
ETERNITY LENX	UC Server for Large Enterprises
ETERNITY MENX	UC Server for Modern Enterprises
ETERNITY GENX	UC Server for Growing Enterprises

BUSINESS IP-PBX	
ETERNITY PE	IP-PBX for Small Businesses
ETERNITY NE	SOHO IP-PBX

HOSPITALITY PBX	
ETERNITY LENX	Hospitality PBX for up to 3,000 Rooms
ETERNITY MENX	Hospitality PBX for up to 2,000 Rooms
ETERNITY GENX	Hospitality PBX for up to 1,000 Rooms
ETERNITY PE	Hospitality PBX for up to 40 Rooms

PLCC EPAX	
ETERNITY MENX	PLCC Express Switch with 512 Ports
ETERNITY GENX	PLCC Express Switch with 240 Ports

IP INTERCOM	
ETERNITY GENX	IP Intercom System with 1,000 IP and 240 TDM Users
ETERNITY MENX	IP Intercom System with 2,000 IP and 512 TDM Users
ETERNITY LENX	IP Intercom System with 2,000 IP and 1296 TDM Users

UNIVERSAL MEDIA GATEWAYS

Different telecom networks offer advantages in different aspects. Today's businesses expect specific benefits from different networks. The VoIP, GSM/3G, ISDN and POTS are four such omnipresent networks and in many instances it is not viable to interface multiple networks with the existing PBX. However, for users, it is vital to reach these networks transparently as they offer wider connectivity and lower telephony costs!

ETERNITY LENX27S

Matrix ETERNITY LENX27S is a High-density Universal Media Gateway, with integrated interfaces for VoIP, GSM/3G, T1/E1 PRI and Analog networks. The Gateway can be deployed in a standalone scenario or can be interfaced with any different brand PBX. The scalable Gateway offers users the flexibility of attending and making calls on all the networks. It also supports flexible and intelligent Least Cost Routing Algorithm to help enterprises keep a tight control



Key Features

- 64 GSM/3G SIMs
- 248 VoIP Channels
- 24 T1/E1 PRI Trunks
- 128 FXO and 1,296 FXS Ports
- Automatic Number Translation
- Detailed Records of up to 1,200 Calls
- Direct Dial-in
- Hot Swappable Cards
- Multi-stage Dialing
- Mobile Network/Base Station Lock
- QSIG over T1/E1 PRI
- Quad-band Support
- Redundancy
- SIM Balance Inquiry and Recharge
- TLS and SRTP Security
- Universal Least Cost Routing
- Web based Management

on the increasing telephony costs. The enterprises can select any of the networks on per call basis for benefits of improved reach, reduced cost and enhanced service quality. Redundancy offers round-the-clock operation without any disruption of services. All the interface cards are hot swappable, eliminating unnecessary system downtime.

ETERNITY MENX16S

Matrix ETERNITY MENX16S is a High-density Universal Media Gateway offering connectivity for VoIP, GSM/3G, T1/E1 PRI and Analog networks. The Gateways can be used in standalone application or can be connected with PBX of any other brand. The Universal Media Gateway offers the benefit of attending



Key Features

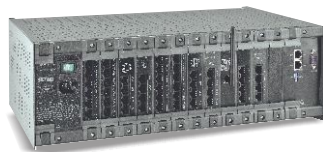
- 64 GSM/3G SIMs
- 248 VoIP Channels
- 8 T1/E1 PRI Trunks
- 128 FXO and 512 FXS Ports
- Automatic Number Translation
- Detailed Records of up to 1,200 Calls
- Direct Dial-in
- Hot Swappable Cards
- Multi-stage Dialing
- Mobile Network/Base Station Lock
- QSIG over T1/E1 PRI
- Quad-band Support
- Redundancy
- SIM Balance Inquiry and Recharge
- TLS and SRTP Security
- Universal Least Cost Routing
- Web based Management

and making calls on any of the networks. The Least Cost Routing Algorithm enables enterprises slash down their telephony costs. Redundancy ensures continuous communications. All the interface cards are hot swappable, eliminating unnecessary downtime.

SARVAM UMG (ETERNITY GENX12S)

Matrix SARVAM UMG – the High-density Universal Media Gateway, offers integrated interfaces for VoIP, GSM/3G, T1/E1 PRI and PSTN networks. It can be used with PBX of any brand or even in standalone mode. It allows users to make and receive calls transparently on all networks. It supports flexible and intelligent Least Cost Routing (LCR), leading to significant cost savings and round-the-clock connectivity. It allows enterprises to dynamically select one of the networks on per-call basis for benefits of improved reach, reduced cost and enhanced quality of service.

Matrix SARVAM UMG provides enterprise grade Gateway features, integration,



Key Features

- 48 GSM/3G SIMs
- 120 SIP Trunks
- 128 VoIP Channels for Simultaneous Calling with Transcoding
- 8 T1/E1/PRI Ports
- 120 CO/FXO Ports and 120 SLT/FXS Ports
- 550 IP-IP Audio Calls without Transcoding
- 64 IP-IP Audio Calls with Transcoding
- 128 IP-TDM Audio Calls
- Automatic Number Translation
- Detailed Records of 1,200 Calls
- Direct Dial-in
- Multi-stage Dialing
- Mobile Network/Base Station Lock
- QSIG over T1/E1 PRI
- Quad-band Support
- SIM Balance Enquiry and Recharge
- TLS and SRTP Security Protocols
- Universal Least Cost Routing Algorithm
- Web based Management

scalability, flexibility, and reliability. This makes it ideal for Call centers, ITSPs and Teleworkers, irrespective of organization size and media network requirements. Matrix SARVAM UMG is interoperable with third party IP-PBXs and ITSPs (Elastix, Broadsoft, Megapath, Brekeke, Nex Vortex, Broadvox, Babytel, Voxbone and SOTEL). Its advanced routing capabilities and comprehensive Gateway features ensure that business' needs of different telecom network requirements are addressed while retaining existing infrastructure with an advantage of faster and transparent operation and reduced telecommunication cost.

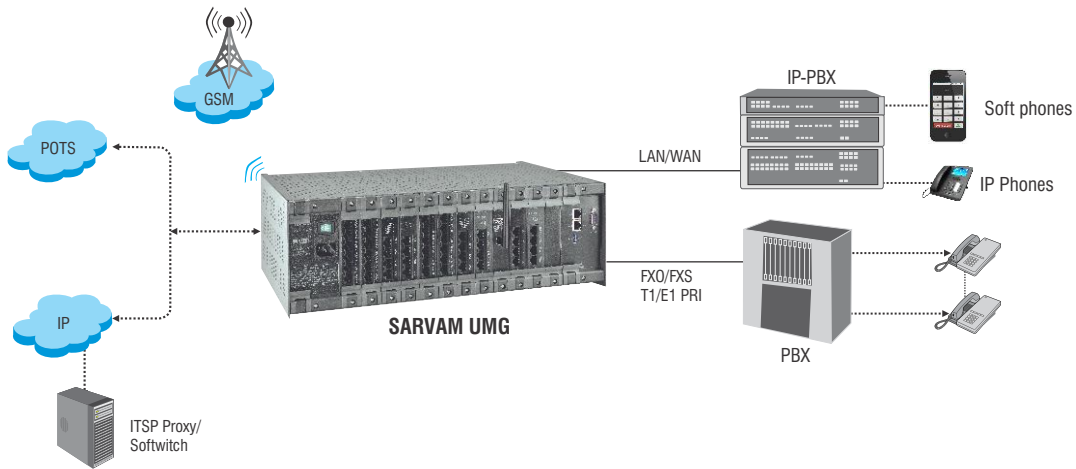
BUILT-IN RESOURCES

SYSTEM RESOURCES	DESCRIPTION	ETERNITY GENX	ETERNITY GENX	ETERNITY MENX [#]	ETERNITY LENX [#]
Compatible Software Server	Unified Communication Server	SARVAM UCS SME	SARVAM UMG	SARVAM UCS ENT	SARVAM UCS ENT
RS232C (COM) Ports	SMDR/PMS/CAS Interfaces	1	1	-	-
USB Ports	Internal USB 2.0 External USB 3.0	2	2	2	2
USB Storage	Internal USB - Up to 64GB (8GB - for Software Firmware and 260 Hours of Recording (Factory Fitted), 64GB Pen Drive can be used for 2170 Hours of Recording) External USB - for future use	8GB	8GB	8GB	8GB
Group Conference (3-Party)	Numbers of 3-Party Conferences	15	-	15	15
Maximum participants in Single Conference	Maximum Participants in Single Conference	21	-	21	21
Voice Messages (16 seconds each)	Auto-Attendant, Voice Help, Voice Tones	15	-	15	15
Ethernet Ports (Gigabit)	Web-based Configuration, PMS, SMDR, System Log, VoIP (LAN and WAN) and VMS	2	2	2	2

SYSTEM SCALABILITY

SYSTEM RESOURCES	DESCRIPTION	SARVAM UCS SME (ETERNITY GENX)	SARVAM UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX) [#]	SARVAM UCS ENT (ETERNITY LENX) [#]
Universal Slots	For Interface Expansion Cards (except VoIP and VMS)	12	12	16	27
SLT/FXS Ports	Single Line Analog Telephones	240	120	512	1296
DKP/DSS Ports	Proprietary Digital Key Phones or DSS Consoles	96	-	128	128
CO/FXO (TWT) Ports	Two Wire Trunk (CO) Lines	64	120	128	128
T1/E1/PRI Ports	T1 or E1 or ISDN PRI Network or Compatible Device	8	8	8	24
GSM/3G Ports	GSM/3G Network	40	48	64	64

The Gateway interfaces with an existing PBX system via FXO/FXS, PRI or over IP. The Gateway work as an adjunct to existing telephony infrastructure, with no need to replace any existing equipment. This not only saves additional investment on acquiring new equipment, but saves time and efforts required for reinstallation of the system and retraining users. When connected with any existing PBX, the Gateways remain completely transparent to all users and allow them to make and receives calls and use the same PBX features.



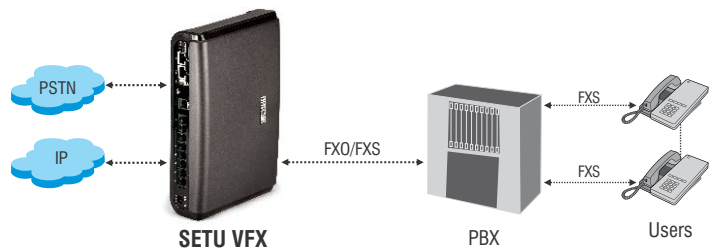
VoIP GATEWAYS

Enterprises are inclined to avail benefits of IP networks while protecting their existing investment against changing communication technologies. The modern Matrix SETU Gateways interfaces VoIP with GSM/3G, POTS and ISDN networks to provide an integrated platform.

SETU VFX

VoIP-FXO-FXS Gateway

Matrix SETU VFX is a single box Gateway solution, offering seamless connectivity between VoIP and PSTN networks. It is a compact, SIP based Gateway suitable for any enterprise application. SETU VFX supports flexible and intelligent call routing options to ensure communication through the most cost-effective network.



Key Features

- Auto Provisioning for Mass Deployments (TR-069)
- Automatic Number Translation
- Call Detail Records
- CLI Display
- DHCP, PPPoE, NAT and STUN
- Fax over IP (T.38 and Pass-Through)
- Hotline
- Lifeline Fallback to PSTN
- Message Wait Indication
- Peer-to-Peer Calling
- Port Forwarding and DMZ
- SNMP Monitoring
- TLS and SRTP Support
- Web based Programming



SETU VFX

Model Name	VoIP Channels	FXO Ports	FXS Ports
SETU VFX404	4	1 (PSTN Pass-through Port)	4
SETU VFX440	4	4	-
SETU VFX808	8	1 (PSTN Pass-through Port)	8
SETU VFX880	8	8	-
SETU VFX844	16	4	4

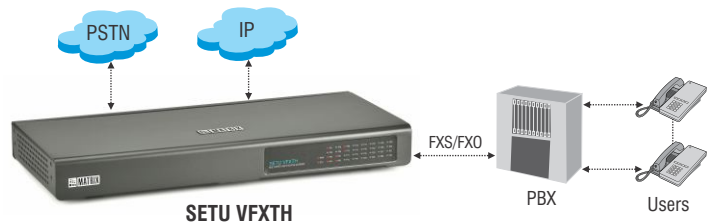


SETU VFXTH

Multi-port VoIP-FXO-FXS Gateway

Matrix SETU VFXTH is a single box Gateway solution, offering seamless connectivity between VoIP and PSTN (FXO and FXS) networks. It is compatible with any SIP infrastructure like soft switches, IP-PBXs, registrars and proxies. SETU VFXTH supports

flexible and intelligent call routing options to ensure that communication is always routed through the most cost-effective network. It is available in five different configurations and varied combinations of FXO/FXS ports.



Key Features

- Auto PSTN Fallback for Assured Connectivity
- Automatic Number Translation
- Call Detail Record (CDR)
- Built-in PBX Functionality
- CLI Display
- Call Progress Tones and Rings
- DHCP, PPPoE, NAT and STUN
- Digest Authentication
- Emergency Number Dialing
- Fax over IP (T.38 and Pass-through)
- Group Call Pickup
- Message Wait Indication
- Hotline
- Peer-to-Peer Calling
- Auto-provisioning for Mass Deployments (TR-069)
- SNMP Monitoring
- TLS/SRTP Protocols over SIP
- Supplementary Calling Features
- Web based Management



SETU VFXTH

Model Name	VoIP Channels	FXO Ports	FXS Ports
SETU VFXTH0808	16	8	8
SETU VFXTH0016	16	-	16
SETU VFXTH0024	24	-	24
SETU VFXTH0032	32	-	32
SETU VFXTH3200	32	32	-

SETU VG

Multi-SIM VoIP to GSM/3G Gateway

Matrix SETU VG is a compact VoIP-GSM Gateway with up to 4/8 GSM and 3G SIM support. Integrated GSM/3G connectivity and open standard SIP support enables SETU VG Gateway to easily connect with leading IP phone systems, software based IP-PBXs, hosted and SIP trunking services. SETU VG is a suitable GSM trunking solution for enterprises, call terminators and areas with limited landline or internet connectivity such as remote project offices, rural and educational institutions.

Key Features



Up to 8 GSM/3G SIM Ports

Save recurring fixed-to-mobile costs and business continuity during PSTN and IP network outage



Hot Swappable SIM Cards

Leverage Convenience of Time and Region Specific Calling Plans and Zero Downtime



3G Internet Access

Avail High Speed Internet (14.4 Mbps DL/5.76 Mbps UL) in Areas with Limited Line Connectivity



SMS Notification

Send SMS notification for critical events such as WAN link down, change of IP address and limited calling minutes, data usage or SIM balance



Penta band 3G/UMTS

Easy Connectivity with 3G Voice and Internet Service Providers across the Globe



Call Details Record

Record Details of up to 2,000 Calls



TR-069 Auto Configuration

Automate Remote Management for Mass Deployments



SNMP Monitoring

Monitor Usage and Health of Network Entities



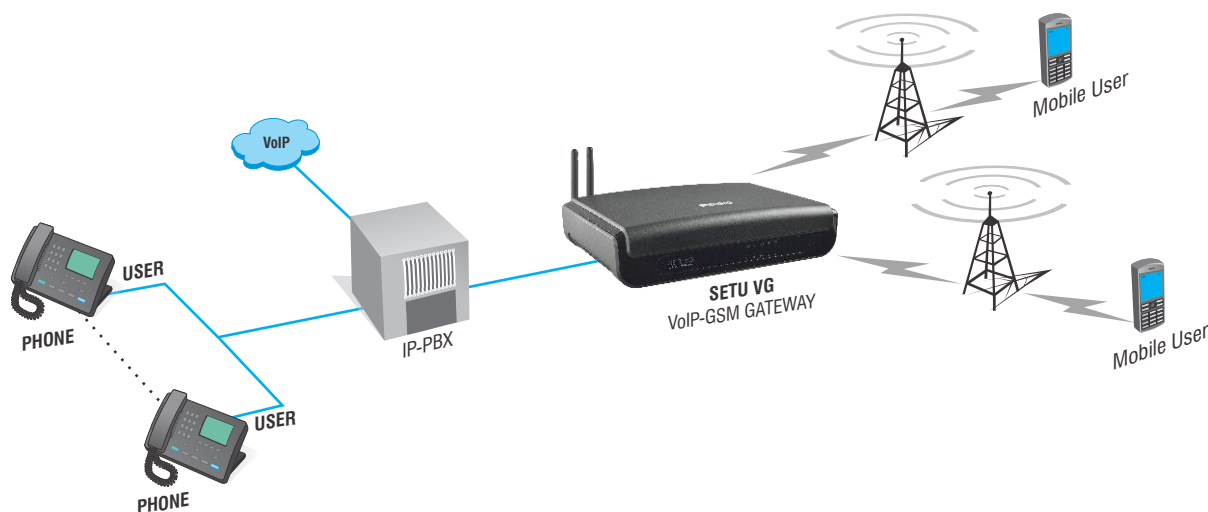
TLS/SRTP Security

Ensure Communication Security over IP Network



Peer-to-Peer Calls

Place Calls between Multiple Locations over IP Network



SETU VTEP

VoIP to T1/E1 PRI Gateway

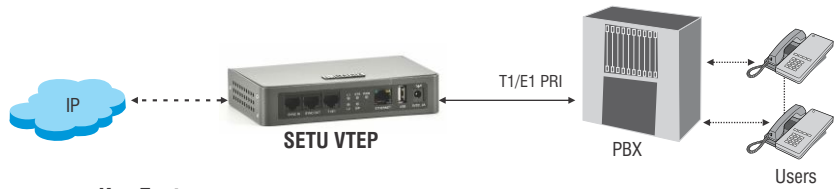
Matrix SETU VTEP is a dedicated Gateway between T1/E1 PRI and VoIP networks. Its compact design, plug-n-play configuration and connectivity for all standard network protocols make it the best fit device for varied applications. For an existing ISDN PBX, it acts as a VoIP access device and for an IP-PBX it offers connectivity to the

ISDN network. The Gateway easily integrates with any existing infrastructure.

SETU VTEP VoIP to T1/E1 PRI Gateway with 32 VoIP Channels and 1 T1/E1 PRI Line



SETU VTEP



Key Features

- Auto-provisioning for Mass Deployments (TR-069)
- Automatic Number Translation
- Call Detail Records
- DHCP Client
- Dynamic DNS
- Fax over IP (T.38 and Pass-through)
- Least Cost Routing
- Network Clock Synchronization
- Peer-to-Peer Calling
- SNMP Monitoring
- VLAN Tagging
- Web based Management

GSM/3G GATEWAYS

GSM/3G has emerged as a superior alternative to the fixed line networks and offer wider coverage and cost benefit. Today's businesses expect the specific benefits from GSM/3G networks without sacrificing existing PSTN/ISDN connectivity. Matrix SIMADO is a family of integrated GSM/3G Gateways, interfacing the wireless GSM/3G networks with the wired PSTN and ISDN networks.

SIMADO GFX44

Multi-Port GSM to FXS Gateways

Matrix SIMADO GFX44 is Gateway equipment offering interfaces for multiple GSM/3G and FXS ports. It can be used with any existing PBX without changing their existing telephony infrastructure or even in standalone mode. The Matrix SIMADO GFX44 works as an adjunct

and supports flexible routing options, providing significant cost savings and round-the-clock connectivity.

SIMADO GFX44 GSM-FXS Gateway with 4 GSM/3G and 4 FXS Ports



SIMADO GFX



Key Features

- Allowed and Denied Lists
- Automatic Number Translation
- Built-in Antenna Splitter
- Call Detail Records
- Call Progress Tones and Rings
- Emergency Number Dialing
- Least Cost Routing
- Quad-band Support
- Windows based Management

GSM/3G FCTs

The SIMADO range of FCTs support voice applications over the GSM/3G network. The GSM/3G FCTs can be used as standalone units or directly interfaced to a PBX, allowing users to dynamically select between GSM and PSTN networks, on per-call basis.

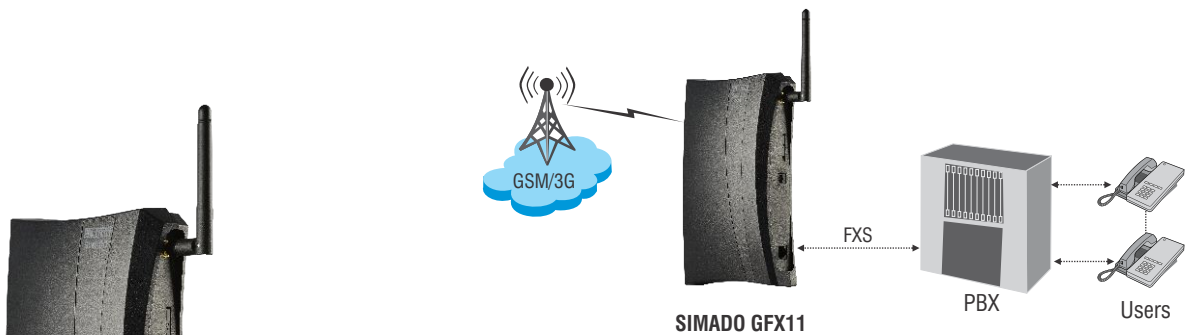
SIMADO GFX11

Fixed Cellular Terminal for Voice Applications

Matrix SIMADO GFX11 is GSM FCT with single port interface of GSM and FXS. It is a perfect solution for upgrading the existing communication infrastructure to the GSM network. Matrix SIMADO GFX11 3G offers accessibility of 3G networks for voice communications. SIMADO GFX11 is available in following configurations:

SIMADO GFX11 FCT for Voice Applications with 1 GSM and 1 FXS Port

SIMADO GFX11 3G FCT for Voice Applications with 1 3G and 1 FXS Port



SIMADO GFX11

Key Features

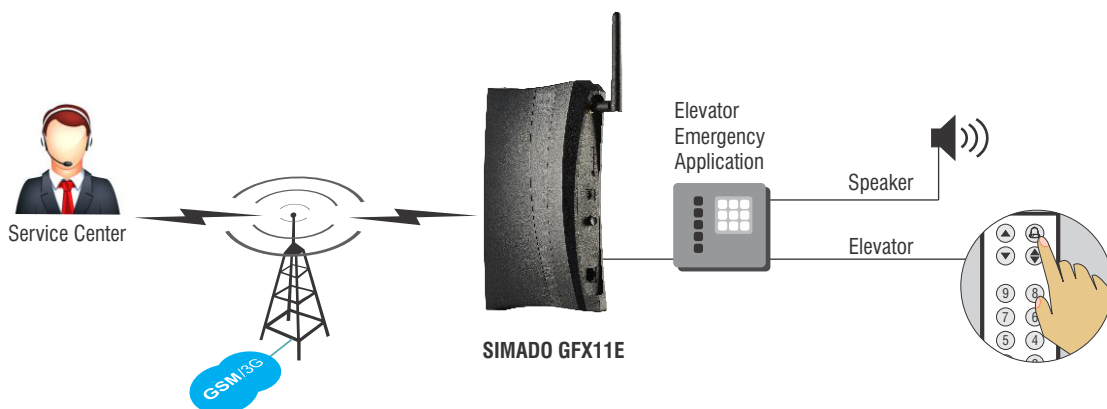
- Allowed and Denied Lists
- Automatic Number Translation (ANT)
- Hot Line
- Multi-stage Dialing
- Network Selection
- Polarity Reversal
- Quad-band Support
- Compact and Sturdy
- CLI Display
- Signal Strength Indication

SIMADO GFX11E

Fixed Cellular Terminal for Elevator Emergency Applications

SIMADO GFX11E is a specialized GSM FCT that enables critical communication during emergency situations such as elevator breakdown and power cuts. GFX11E establishes communication link with the help center to allow a user in trouble to get immediate help.

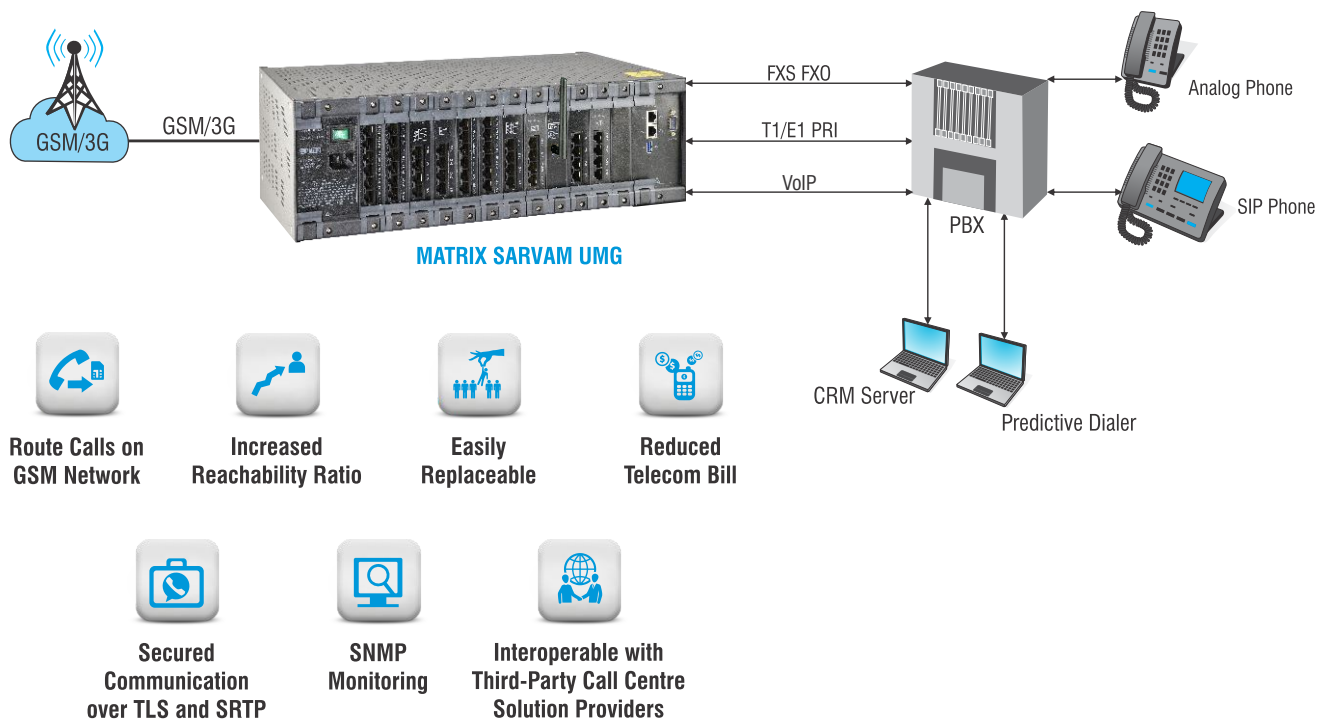
SIMADO GFX11E can be used in various application areas such as elevators, ATM Centers, arcades, hospitals, shopping malls and senior citizen's homes.



SIMADO GFX11E

HIGH DENSITY GSM-VoIP GATEWAY

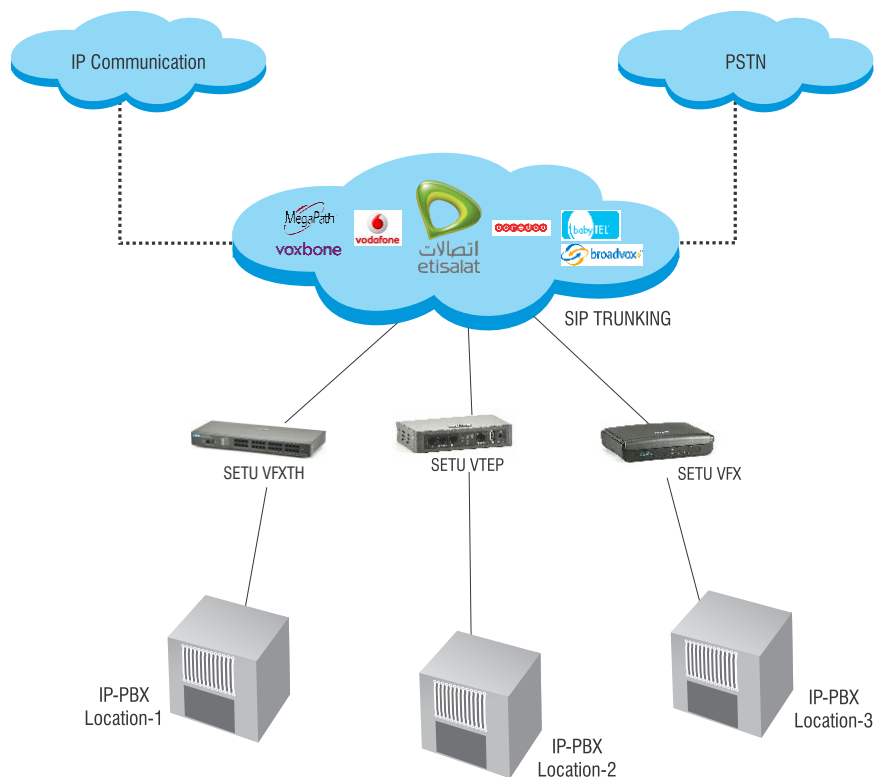
Built for Speed, Traffic and Flexibility



SIP TRUNKING GATEWAYS

Built for Speed, Traffic and Flexibility

- Save on Long Distance Calls
- Easy Migration to IP
- Secure, Reliable and Scalable
- Interoperable with Leading PBXs and ITSPs
- For Call Centres, Enterprises, Branch Offices





Fixed and Scalable Large Portfolio

Easy Integration **Connectivity** Convenience Branch Office Solutions

MATRIX NETWORK



MATRIX CUSTOMERS

- ABB
- Adani Group
- Airtel
- American Express
- Amoli Organics
- Alfa Laval India Limited
- Apollo Hospitals
- Bajaj Auto
- Bharat Petroleum
- Blue Dart Express Ltd.
- Brakes India
- Cadila Pharmaceuticals
- Celyc systems
- Chemcon Chemicals
- China Ecotek
- China Steel
- Cipla
- DIC Fine Chemical
- Domino's Pizza
- Dr. Reddy's Laboratories
- DSM Nutrition
- DuPont
- Garnier Laboratories
- GEC Alstom
- GETCO Ahmedabad
- Glenmark Pharmaceuticals
- GlaxoSmithKline
- Haier
- Hindustan Unilever
- Hyundai Motors
- Indian Oil Corporation
- INOX Air Products
- Investis
- Johnson & Johnson
- Kurlon
- L&T
- National Bank of Abu Dhabi
- Linde
- L'Oreal India
- Micromax
- NETAFIM
- PepsiCo
- Price Waterhouse Coopers
- Raheja Construction
- Raychem RPG
- Raymond
- Reliance Industries
- Reserve Bank of India
- Schneider
- Seforge
- Shapoorji Pallonji
- State Bank of India
- Steel Authority of India
- Sun Pharmaceutical
- Tata Steel
- Tata Tele Services
- TBEA
- The World Bank, Ghana
- Vodafone
- Wipro

ABOUT MATRIX

Established in 1991, Matrix is a leader in security and telecom solutions for modern businesses and enterprises. Matrix, an innovative, technology driven and customer focused organization, is committed to keep pace with the revolutions in security and telecom industries. With more than 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products such as Unified Communications, IP-PBX, Universal Gateways, Convergence, VoIP Gateways, GSM Gateways, IP Video Surveillance, Access Control and Time-Attendance. These solutions are feature-rich, reliable and conform to the international standards. Having global footprints in Europe, North America, South America, Africa and Asia through an extensive network of more than 1,000 system integrators, Matrix ensures that the products serve the needs of its customers faster and longer. Matrix has gained trust and admiration of customers representing the entire spectrum of industries. Matrix has won many national and international awards for its innovative products.



MATRIX COMSEC

Head Office

394-GIDC, Makarpura, Vadodara-390 010, India.
Ph: +91 265 6137222
E-mail: Inquiry@MatrixComSec.com
SMS 'MATRIX' to +91 99987 55555

Factory

19-GIDC, Waghodia, Dist. Vadodara-391 760, India.
Ph: +91 7567875244

www.MatrixTeleSol.com

Call: 1800-258-7747

For further information, please contact:



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