





#### **MATRIX R&D**

All Matrix products are indigenously designed passing through various development stages beginning with Product Conceptualization, Hardware Design, Software Designing and Engineering. With more than 35% of its human resources dedicated to the development of new products, Matrix R&D is the foundation of its growth and sustenance. The R&D team designs products conforming to relevant international standards. Matrix makes substantial investment in R&D tools and equipment to stay abreast of the latest technological changes. The Indian Ministry of Science and Technology has granted DSIR (Department of Scientific & Industrial Research) recognition to the Matrix R&D Center for its contribution to the Industry.



#### MATRIX MANUFACTURING

Based at Vadodara in India, Matrix Manufacturing unit is operated and managed by a team of professionally qualified and dedicated engineers. The structure houses various sections like Production, Quality Control and Supply Management with a production capacity of about 1,000,000 ports per annum. With more than 50 products, Matrix Manufacturing has been delivering cuttingedge technology products for more than two decades now.



#### **MATRIX MARKETING**

The marketing team at Matrix strongly believes in value-based marketing and strong networking. Right from product conceptualization, designing to the commercial marketing, Matrix adopts a completely global approach. Backed by an extensive network of more than 500 channel partners across the globe, Matrix ensures that the products serve the customer needs faster and longer. Various Marketing Tools and activities including strong marketing collaterals, solution designing, online and print media communication, promotional and networking activities form very elemental to Matrix Marketing.



#### **MATRIX TECHNICAL SUPPORT**

A full-fledged Technical Support Centre offers 24x7 support to Matrix Customers and Channel Partners. Manned by trained and efficient engineers the Technical Support Centre offers upfront, proactive and prompt assistance. Dedicated regional support teams expertize in offering local support services. Latest CRM tools are used for faster problem solving and assistance. The support technicians conduct regular in-house and field training, providing hands-on the product and its features.



#### **MATRIX AT A GLANCE**

- 50+ Telecom Products
- 700+ Man-years of R&D Experience
- 500+ Channel Partners
- 4,000,000+ Satisfied Customers
- 3,500,000+ Line-units installed
- 15,000,000+ Calls Connected Everyday
- Growing at 1500 + Line-units a Day
- Global Footprint: Asia, Europe, Africa, Northern and Southern America and Australia
- · Quality Certifications: CE. FCC. TEC. RoHS

## **AWARDS AND ACHIEVEMENTS**



Computer & Telecommunication Systems

Corporate Award for Excellence in

Reader's Choice Award Best PBX-KTS Company (Year: 2004, 2005, 2006, 2007, 2010)



**Best SSI Unit** 



Best Electronics Company Award



**Product Design Awards** 





### MATRIX PRODUCT RANGE

Matrix serves diverse customer needs with its comprehensive range of Gateways, Business Communication Systems and Security Products. Matrix delivers cutting-edge technology products rich in features and functionalities. The products are in-hand with the latest technological developments and are designed to serve the customer needs-faster and longer. Matrix gateways seamlessly integrate traditional telephony interfaces to the varied networks and help to 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. The business communication systems offer absolute communication solutions to businesses of all sizes-Right from SOHOs to SMBs, SMEs and the Enterprises. The advanced security solutions ensure complete safety, security and automation for business organizations, buildings, offices, factories and remote project sites.

### **GATEWAY PRODUCT RANGE**

#### **Universal Gateways**

**ETERNITY ME** High-Density Universal Gateway **ETERNITY GE** Medium-Density Universal Gateway

#### **GSM/3G Gateways**

**SIMADO GBR** GSM/3G-BRI Gateways **SIMADO GFX** GSM/3G-FXS Gateways

#### **GSM/3G FCTs**

SIMADO GFX11 GSM/3G Fixed Cellular Terminal for Voice Applications

SIMADO GFX11E GSM Fixed Cellular Terminal for Elevator Emergency Applications

#### **VoIP Gateways**

SETU VGFX VoIP-GSM/3G-FXO-FXS Gateways SETU VGB VoIP-ISDN BRI Gateways SETU VTEP VoIP-T1/E1 PRI Gateways SETU VFXTH VoIP-FXO-FXS Gateways SETU VFX VoIP-FXS Gateways

## **VoIP ATAs**

SETU ATA211G VoIP Adaptor with GSM Connectivity SETU ATA211 VoIP Adaptor with FXO Port SETU ATA2S VoIP Adaptor with 2 FXS Ports

#### Office-in-a-Box

NAVAN CNX Single Box Solution for All Office Communication Needs

### **BUSINESS COMMUNICATION SYSTEMS**

#### **Business IP-PBXs**

**ETERNITY LE** IP-PBX for Large Enterprises

ETERNITY ME IP-PBX for Enterprises with Universal Connectivity ETERNITY GE IP-PBX for SMEs with Universal Connectivity ETERNITY PE IP-PBX for SMBs with Universal Connectivity

**ETERNITY NE** IP-PBX for Small Businesses

SAPEX Pure IP-PBX for SMB

#### **Hospitality PBX**

**ETERNITY ME** Hospitality PBX for Large Hotels

**ETERNITY GE** Hospitality PBX for Small to Medium Hotels

**ETERNITY PE** Hospitality PBX for Small Hotels

#### **PLCC EPAX**

**ETERNITY ME** PLCC Express Switch with 512 Ports **ETERNITY GE** PLCC Express Switch with 120 Ports

#### **Building Intercom**

**ETERNITY ME** Intercom System Up to 512 Ports **ETERNITY GE** Intercom System Up to 240 Ports

#### **User Terminals**

SPARSH VP Mid-range VoIP Phones SPARSH MS Mobile Softphone for Android/iOS EON48 Digital Key Phones NEO10 Analog Telephones

# **UNIVERSAL GATEWAYS**

Matrix Universal Gateway offers connectivity to POTS, GSM/3G, ISDN BRI, T1/E1 PRI and VoIP networks. Based on industry standard protocols, the gateway transparently route calls between various networks for better Quality of service, Convenience and Cost Savings. The Least Cost Routing feature ensures that call being routed through most cost-effective network.

## ETERNITY ME10S High-Density Universal Gateway

Matrix ETERNITY ME10S is a High-Density universal gateway offering integrated interfaces for VoIP, GSM/3G, ISDN and POTS networks. The universal gateway seamlessly routes calls from one network to another. The modular architecture with universal slot architecture offers complete flexibility while scaling-up the configuration. The interface cards are available in varied configurations. The modular and universal slots architecture offers complete flexibility while scaling-up the configuration. The interface cards are available in varied configurations. Redundancy offers round-the-clock operation without any disruption of services. All the interface cards are hot-swappable, eliminating unnecessary system down-time.



### **Key Features**

- 64 GSM/3G SIMs
- 320 VoIP Channels
- 8 T1/E1 PRI
- 32 ISDN BRI
- 128 FXO and 320 FXS
- Automatic Number Translation
- · Call Detail Records
- · Direct Dial-In
- Hot Swap

- · 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 Support
- · Universal Routing with Least Cost
- Web based Management

# **ETERNITY GE12S** Medium-Density Universal Gateway

Matrix ETERNITY GE12S is medium-density universal gateway equipment offering integrated interfaces for VoIP, GSM /3G, ISDN and POTS networks. The universal gateway allows the users to make and receive calls on all the networks transparently. It supports flexible and intelligent Least Cost Routing (LCR) options providing significant cost savings and round-the-clock connectivity. This allows them to dynamically select one of the networks on per-call basis for obvious benefits of reach, cost and quality of service.

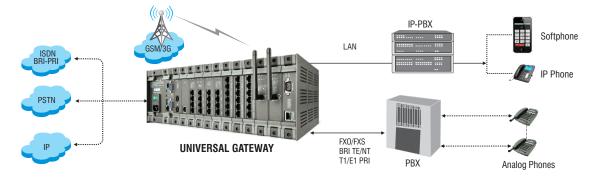


### **Key Features**

- 40 GSM/3G SIMs
- 384 VoIP Channels
- 8 T1/E1 PRI
- 32 ISDN BRI
- 128 FXO and 240 FXS
- Automatic Number Translation
- · Call Detail Records
- · 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 Support
- · Universal Routing with Least Cost
- · Web based Management

The gateway interfaces with an existing PBX system via FXO/FXS, BRI, PRI or over IP. The gateways 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 also saves time and efforts required for re-installation of the system and re-training to users. The Universal Gateways internally manage different protocols required to interface with different telecom networks and provides a consistent interface to all its users. When connected with any existing PBX, the gateways remain completely transparent to all users and allow them to make and receives calls and also use PBX features as previously. Least Cost Routing algorithm to select the most appropriate network for a given call also works transparently.



## **VOIP GATEWAYS**

Modern organizations are recognizing VoIP as the cost-effective and flexible alternative for the day-to-day communication requirements. Enterprises are inclined to avail benefits of IP networks while protecting their existing investment against changing communication technologies. The new-age Matrix SETU Gateways interfaces VoIP with GSM/3G, POTS, ISDN networks to provide an integrated platform for optimizing expenses, enhancing solutions and maintaining existing dialing habits.

# SETU VGFX Multi-Port VoIP to GSM/3G, FXO and FXS Gateway for Voice and Internet Applications

Matrix SETU VGFX is a feature-rich gateway offering VoIP, GSM/3G and POTS connectivity on a single platform. It is compatible with any SIP infrastructure like Soft Switches, IP-PBXs and Proxies. The key strength of SETU VGFX is the call routing logic and therefore it is the perfect choice as a terminal gateway. Apart from providing voice services, it also offers high speed data accessibility over 3G/HSPA internet data networks. This makes the gateways a perfect solution for offices and businesses in remote location with less or no fixed line IP connectivity.

SETU VGFX8422 VoIP Gateway with 8 VoIP Channels, 4 GSM/3G Channels, 2 FXO Ports and 2 FXS Ports SETU VGFX8404 VoIP Gateway with 8 VoIP Channels, 4 GSM/3G Channels and 4 FXS Ports





SETU VGFX

- **Kev Features**
- Auto Provisioning for Mass Deployments (TR-069)
   Message Wait Indication
- Auto PSTN Fallback for Assured Connectivity
- Automatic Number Translation
- · Call Detail Records
- DHCP Server and Client
- Fax over IP (T.38 and Pass-Through)
- Internet Accessibility over 3G/HSPA networks
- · Peer-to-Peer Calling
- Port Forwarding and DMZ
- · SIM Balance Inquiry and Recharge
- SNMP Monitoring
- TLS and SRTP Support
- VLAN Tagging

## SETU VGB Multi-Port VoIP to ISDN BRI Gateway

Matrix SETU VGB is compact and feature-rich gateway offering VoIP and ISDN BRI connectivity on a single platform. It can be deployed with any SIP Infrastructure like soft switches. IP-PBXs. Registrars and Proxies, Easily integrating with an ISDN PBX, it grants access to the newage VoIP telephony. The 3G wireless network offers data connectivity to the users behind the LAN and also facilitates VoIP calling making it a perfect solution for offices and business units in remote locations, where fixed-line IP connectivity may not be available easily.

SETU VGB802 VoIP Gateway with 8 VoIP Channels and 2 ISDN BRI Ports





SETU VGB

#### **Kev Features**

- Auto Provisioning for Mass Deployments (TR-069) Message Wait Indication
- · Automatic Number Translation
- · Call Detail Records
- · Configurable TE/NT BRI Ports
- . DHCP Server and Client
- Fax over IP (T.38 and Pass-Through)
- Internet Accessibility over 3G/HSPA networks
- Network Clock Synchronization
- Port Forwarding and DMZ
- · Peer-to-Peer Calling
- SIM Balance Inquiry and Recharge
- · SNMP Monitoring
- TLS and SRTP Support

## **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 support 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





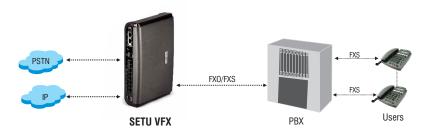
#### **Key Features**

- 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 Programming

# SETU VFX Low-Density Multi-Port VoIP-FXO-FXS Gateway

Matrix SETU VFX is a single-box Gateway solution, offering seamless connectivity between VoIP and POTS 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.

SETU VFX440 VoIP Gateway with 4 FXO Ports SETU VFX404 VoIP Gateway with 4 FXS and 1 FXO (PSTN Pass-Through) Port SETU VFX880 VoIP Gateway with 8 FXO Ports SETU VFX808 VoIP Gateway with 8 FXS and 1 FXO (PSTN Pass-Through) Port





- · 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 VFXTH VoIP-FX0-FXS Gateways**

Matrix SETU VFXTH is a Single-box Gateway solution, offering seamless connectivity between VoIP and POTS (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 always through the most cost effective network. It is available in 10 different in configurations with varied combinations of FXO/FXS ports.



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

# **Key Features**

- Automatic Number Translation (ANT)
- · Auto PSTN Fall-Back for Assured Connectivity
- Call Detail Record (CDR)
- 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
- SRTP/TLS over SIP
- Supplementary Calling Features
- Web based Management



# **VoIP ATAs**

Matrix SETU ATA family interfaces legacy telephone devices with IP-based networks. In addition to the standard connectivity of IP and PSTN, it also offers connectivity between IP, GSM and PSTN networks. An ATA provides a user with the facility of using a standard telephone instrument yet make VoIP and GSM calls. It gives the benefit of using VoIP and convenience of using existing telephony products and methods to reduce communication cost. SETU ATA is available in following configurations:

**SETU ATA211G** Analog Telephone Adaptor with 3 SIP Accounts, 1 GSM, 1 FXS Port and 2 Ethernet Ports **SETU ATA211** Analog Telephone Adaptor with 3 SIP Accounts, 1 FXO and 1 FXS Port with 2 Ethernet Ports **SETU ATA2S** Analog Telephone Adaptor with 3 SIP Accounts, 2 FXS and 2 Ethernet Ports



### **Key Features**

- 3-Party Conference
- Auto Configuration
- Auto PSTN Fallback (SETU ATA211)
- · CLI Display
- Codec Selection: G.711, G.723.1, G.729AB
- DHCP Client
- Dial Plan
- Echo Cancellation: G.168 up to 32ms
- Fax over IP (T.38 and Pass-Through)

- Multiple SIP Accounts
- NAT and STUN
- Peer-to-Peer Calling
- Phone Book
- PIN Authentication
- PPPoE Client
- Programmable Call Progress Tones and Rings
- Quad-Band Support (SETU ATA211G)
- · Syslog Client
- WAN & LAN Ports Surf and Talk simultaneously







SETU ATA211



SETU ATA2S

# 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 POTS/ISDN connectivity. Matrix SIMADO is a family of integrated GSM/3G Gateways, interfacing the GSM/3G networks with the wired POTS and ISDN networks.

## SIMADO GBR Multi-Port GSM/3G to ISDN BRI Gateway

Matrix SIMADO GBR42 is a cost-effective solution for SOHOs and Enterprises to connect existing ISDN PBX to the GSM networks through BRI ports. The stand-alone device supports flexible and intelligent Least Cost Routing options providing significant cost savings and round-the-clock connectivity.

SIMADO GBR21 GSM-BRI Gateway with 2 GSM/3G and 1 ISDN BRI Port SIMADO GBR42 GSM-BRI Gateway with 4 GSM/3G and 2 ISDN BRI Ports





SIMADO GBR

#### **Key Features**

- · Allowed and Denied Lists
- Automatic Number Translation
- · Built-in Antenna Splitter
- · Call Detail Records
- · Call Progress Tones and Rings
- · Least Cost Routing

- Network Clock Synchronization
- Configurable TE/NT BRI Ports
- · Quad-Band Support
- Table-Top, Wall-Mount
- · Windows based Programming

### 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 a stand-alone 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 Ports and 4 FXS Ports





### **Key Features**

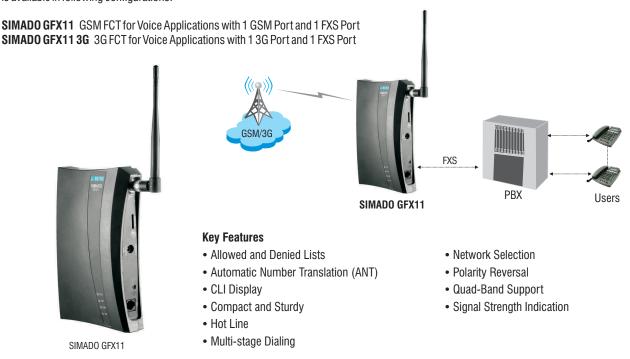
- · Allowed and Denied Lists
- Automatic Number Translation
- Built-in Antenna Splitter
- Call Detail Records
- Call Progress Tones and Rings
- · Emergency Number Dialing
- · Least Cost Routing
- · Quad-Band Support
- · Windows based Programming

# GSM/3G FCTs

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

## SIMADO GFX11 Fixed Cellular Terminal for Voice Applications

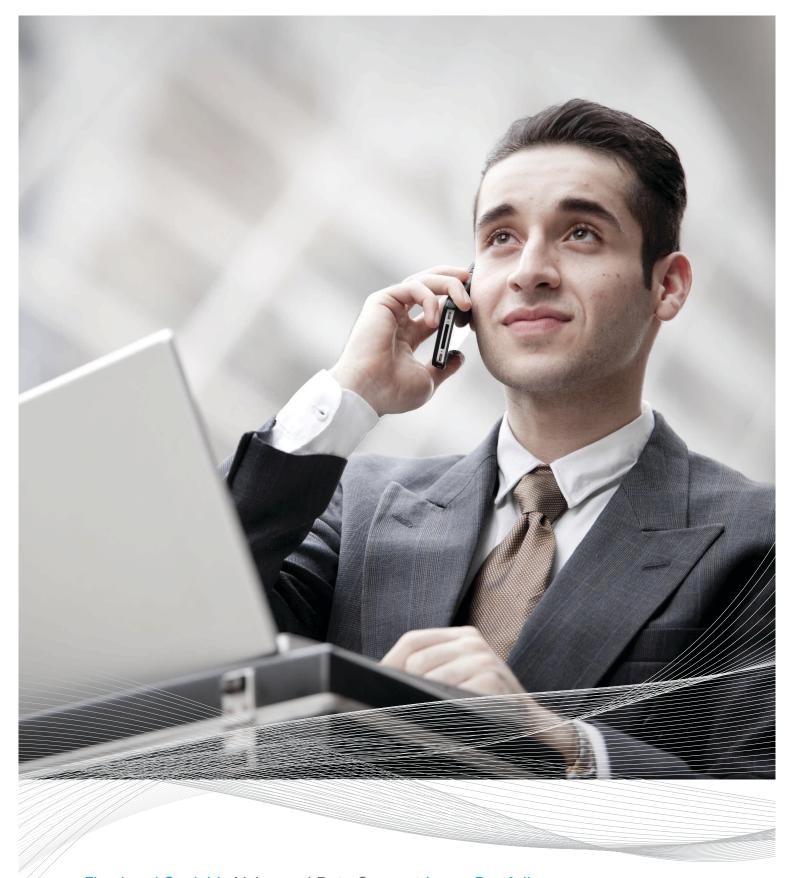
Matrix SIMADO GFX11 is GSM FCT with single port interface for GSM and FXS. It is a perfect solution for connecting the existing PBX Infrastructure to the GSM network. Matrix SIMADO GFX11 3G offers accessibility of 3G networks for Voice communication. SIMADO GFX11 is available in following configurations:



## 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 break-down and power cuts. GFX11E establishes communication link with the help center to allow the user in trouble to get immediate help. SIMADO GFX11E can be used in various application areas such as elevators, ATM centers, parkades, hospitals, shopping malls and senior citizen's homes.





Fixed and Scalable Voice and Data Support Large Portfolio
Easy Integration Connectivity Convenience Cost Branch Office Solutions

#### MATRIX NETWORK



## **MATRIX CUSTOMERS**

Over past two decades, Matrix products have contributed significantly to improving efficiency and productivity of many organizations by providing dependable telecom solutions to them. Matrix customers are diverse and include large corporate offices, telecom service providers, institutions, factories, call centers, hotels, hospitals, housing societies and apartment buildings and residences. To name a few:

Alfa Laval American Express Bajaj Auto Bayer Bharat Petroleum Blue Dart Express Cadilla Pharma Carrier Aircon Dr. Reddy's Lab Du-Pont

Garnier Laboratories

**GEC Alstom Grindwell Norton** Hindustan Lever Hutch

Indian Oil Corporation

Indian Space Research Organisation

Johnson & Johnson Larsen & Toubro L'Oreal India McDowells

National Bank of Abudhabi Pentasoft Technologies

Pepsi

PriceWaterHouseCoopers

Raymonds Reliance Infocom Samsung Corporation SmithKline Beecham State Bank of India

Tata Telecom Services Tommy Hilfiger US Embassy, Mauritius World Bank, Ghana Writers Corporation

### **ABOUT MATRIX**







Established in 1991, Matrix is a leader in Telecom and Security solutions for modern businesses and enterprises. An innovative, technology driven and customer focused organization; the company is committed to keep pace with the revolutions in the telecom and security industries. With around 30% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like IP-PBX, Universal Gateways, VoIP Gateways and Terminals, GSM Gateways, Access Control and Time-Attendance Systems, Video Surveillance System and Fire Alarm Systems. These solutions are feature-rich, reliable and conform to the international standards. Having global foot-prints in Asia, Europe, North America, South America and Africa through an extensive network of more than 500 channel partners, 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 international awards for its innovative products.









## MATRIX COMSEC

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