

## Matrix SETU Range of VoIP Products

IP-PBX

Universal Gateways

VoIP GSM/3G/CDMA Gateways

VoIP FXO-FXS Gateways

VoIP ATAs

VoIP Phones

VoIP Products with Superior Technology,  
Features and Performance





## MATRIX MANUFACTURING

Based at Vadodara in India, Matrix manufacturing unit is operated by a team of professionally qualified and dedicated engineers. Spread over an area of 25,000 sq. ft, the structure houses departments like Assembly, Testing, Quality Control, Purchase, Stores, Despatch and Accounts. Matrix has a production capacity of about 1,000,000 ports per annum. The factory also houses a full-fledged technical support center spread over an area of 10,000 sq. ft, manned by trained and efficient engineers. The center provides immediate technical assistance to Matrix channel partners and customers in installation, operation and maintenance of the products.



## MATRIX MARKETING

The marketing team at Matrix strongly believes in value-based marketing and strong networking. A special customer care cell provides prompt and professional response to the customers. Backed by an extensive network of more than 500 channel partners, Matrix ensures that the products serve the communication needs, faster and longer.



## MATRIX R&D

All Matrix products are indigenously designed. With around 30% of its human resources dedicated to the development of new products, Matrix R&D is the foundation of its growth and sustenance. Matrix R&D is located at its corporate office and is spread over an area of 15,000 sq. ft. 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.



## MATRIX ACHIEVEMENTS

- In the year 2010, Matrix won the EFY Readers' Choice Award for the Best PBX- KTS Company.
- In the year 2009, Matrix received the Best Electronics Company Award from the Gujarat Electronics and Software Industries Association (GESIA).
- In the year 2008, Matrix was conferred the Best SSI Unit Award by the Federation of Gujarat Industries (FGI).
- In the year 2008, Matrix received the Best Electronics Company Award from the Gujarat Electronics and Software Industries Association (GESIA).
- In the year 2007, Matrix was conferred the 9th IETE Corporate Award for Excellence in Computer & Telecommunication Systems by the Institution of Electronics & Telecommunication Engineers, India.
- In the year 2007, Matrix won the EFY Readers' Choice Award for the Best PBX- KTS Company for the fourth year in a row.
- In the year 2006, Matrix won the EFY Readers' Choice Award for the Best PBX- KTS Company.
- In the year 2005, Matrix won the EFY Readers' Choice Award for the Best PBX-KTS Company.
- In the year 2004, Matrix won the EFY Readers' Choice Award for the Best PBX- KTS Company.
- In the year 2004, Matrix won the Award for Excellence in Professional Electronics conferred by the Ministry of Communication and Information Technology.



## MATRIX AT A GLANCE

- Over 40 Telecom Products
- 200+ Man-years of R&D Experience
- 500+ Channel Partners
- 150,000+ Satisfied Customers
- 1,500,000+ Line-units Installed
- 15,000,000+ Calls Connected Everyday
- Growing at 1500+ Line-units a Day
- Global Footprint: Asia, Europe, Africa, North America and South America
- Quality Certifications: ISO, CE, FCC, TEC, RoHS

Matrix SETU is a family of VoIP Phones and VoIP Gateways. SETU Gateways interface with other telecom networks like Plain Old Telephone System (POTS), ISDN, T1/E1, GSM/CDMA/3G and VoIP. They come in different foot-prints to match the exact needs of any organization. Matrix SETU products are ideal for corporate offices, factories, sales organizations, call centers, branch offices, public call offices, remote project sites, residences, etc. Following are the few salient points why Matrix SETU products make a compelling choice.



## Widest Range of VoIP Products

Unique Integration of  
TECHNOLOGY  
FEATURES  
PERFORMANCE

## IP-PBX



### **ETERNITY** The IP-PBX with Seamless Mobility and Universal Connectivity

Matrix ETERNITY IP-PBX offers connectivity to all-pervasive legacy and new generation wireless telecom networks like POTS, ISDN, T1/E1, GSM, 3G, CMDA and VoIP. It facilitates smooth and natural migration to the new-age IP infrastructure combining best of both the worlds. Thus, ETERNITY is an 'open' and truly 'integrated' IP-PBX.

It provides true mobility to its users by allowing them to use their mobile phones as PBX extensions. Not only users can make and receive calls, they can also use most of the PBX functions like Transfer, Forward, Voice Mail, Directory and Conference using their mobile phones from within and outside office. This seamless mobility means complete freedom from being tied to your desk for internal or external communication.

ETERNITY is a family of IP-PBX solutions. It is available in the following variants:

**ETERNITY PE** The Enterprise-Grade PBX for Futuristic Businesses

**ETERNITY GE** The All-Integrated Communication Platform for Growing Enterprises

**ETERNITY ME** The Complete Communication System for Modern Enterprise

### **SAPEX** All-in-one Embedded IP-PBX Server

Matrix SAPEX is a pure IP-PBX with embedded Registrar, Proxy, Voice Mail, IM and Presence Server with built-in Auto-Attendant. It plays the role of a Central Proxy SIP Server to which multiple SIP Compliant PDAs, Gateways and SIP Phones can be registered. SAPEX can be registered to multiple Service Providers as a client. It supports least cost routing feature which routes the dialed numbers through programmed selective SIP trunk resulting into cost reduction and an extended business reach.

SAPEX is available in two variants.

**SAPEXSDM** With 20 Concurrent Calls

**SAPEXDDM** With 30 Concurrent Calls



SAPEX

### **Key Features**

- 10 SIP Accounts
- 100rel/PRACK
- 3-Party Conference
- Built-in Auto Attendant
- Built-in Voice Mail
- Call Forking
- CLI Based Routing
- Configuration/Firmware Management
- Dynamic DNS (DDNS)
- Embedded Registrar and Proxy Server
- Fax Tone Detection
- Instant Messaging
- Peer-to-Peer Calling
- Presence
- RADIUS Client
- Supplementary Services (Call Forward, Call Hold, Call Pickup, Call Park, Call Transfer)
- SMTP Client
- SNMP
- Voice Transcoding

## VoIP GATEWAYS

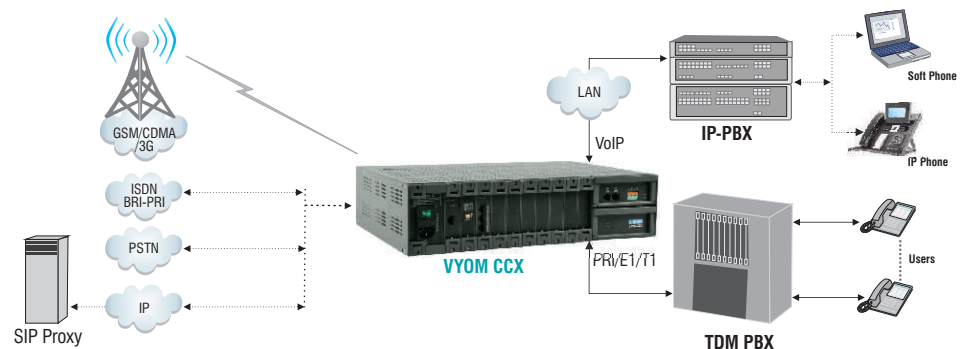
Matrix Gateways are designed to meet the requirements of converting VoIP to GSM/CDMA/3G, ISDN BRI/PRI and POTS networks as all these network offer different benefits. It can be used with any PBX. It supports flexible and intelligent call routing. Gateways are available in various configurations to match exact requirements.

### VYOM CCX High Density Universal Gateway

VYOM CCX is a High-Density SIP Gateway offering integrated interfaces for GSM, ISDN BRI/PRI, T1/E1 and POTS networks. It can be used with any brand of existing PBX. VYOM CCX delivers high performance with flexible architecture, stanch voice quality and faster IP-TDM, TDM-IP and IP-IP call processing. VYOM CCX internally manages different protocols required to interface with different telecom networks and provides a consistent interface to all its users. When connected with any existing PBX, it remains completely transparent to the users and allows them to make and receives calls and also use PBX features as previously. Least Cost Routing (LCR) algorithm to select the most appropriate network for a given call also works transparently. The next-generation IP platform delivers high performance and is highly reliable.



VYOM CCX



#### Key Features

- 9 SIP Accounts
- 256 VoIP Calls
- 10 T1/E1/PRI and 40 BRI
- 40 GSM
- 120 FXO/FXS
- Automatic Number Translation (ANT)
- Call Detail Recording (CDR)
- Direct Dial-In Routing (DDI Routing)
- High Density IP Switching
- IMEI Numbers
- Least Cost Routing (LCR)
- Mobile Network/Base Station Lock
- Peer-to-Peer Calling
- Quad-Band Support
- Returned Call to Original Caller (RCOC)
- SIM PIN and PUK
- Universal Routing
- Voice Codec: G.711 (A=law,  $\mu$ -law), G.7231, G.729, iLBC, GSM-FR, GSM-EFR
- Web-based Programming

### ETERNITY Universal Telephony Gateway

Matrix ETERNITY is a universal gateway equipment offering integrated interfaces for VoIP, GSM/CDMA/3G, ISDN BRI/PRI, T1/E1 and POTS networks. It can be used with any brand of existing PBXs or even in a stand-alone mode. The ETERNITY 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 (QoS).



ETERNITY

#### Key Features

- 32 SIP Accounts
- 3G Network Support
- Automatic Number Translation
- Call Detail Recording (CDR)
- CLIP
- CLI based Routing
- Direct Dial-In (DDI) Routing
- Fixed Number Dialing
- IMEI Numbers
- Multi-Stage Dialing
- Mobile Network/Base Station Lock
- QSIG
- Quad-Band Support
- Remote Programming
- SIM PIN and PUK
- Universal Routing with least cost
- Voice Codec: G.711 (A-law,  $\mu$ -Law), G.723, G.729AB, GSM-FR, GSM-EFR and iLBC
- Web-based Programming



SETU VGFX

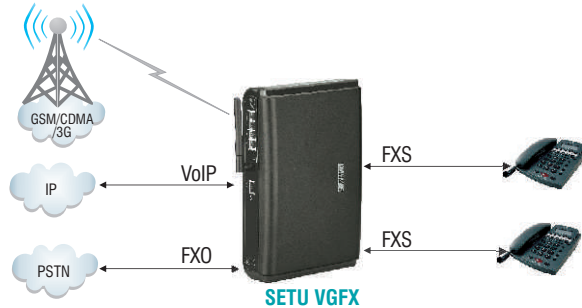
### SETU VGFX Multi-Port SIP based VoIP to GSM, FXO and FXS Gateway

Matrix SETU VGFX is a feature-rich gateway offering VoIP, GSM and PSTN connectivity on a single platform. It is compatible with any SIP infrastructure like Soft Switches, IP-PBXs, Registrars and Proxies. The key strength of SETU VGFX is the call routing logic and therefore it is the perfect choice as a terminal gateway. It is ideal for stand alone Business and SOHO applications to reduce the communication cost significantly. SETU VGFX is available in three Configurations.

**SETU VGFX8422** Multi-port VoIP Gateway with 8 VoIP Channels, 4 GSM Channels, 2 FXO Ports and 2 FXS Ports

**SETU VGFX8440** Multi-port VoIP Gateway with 8 VoIP Channels, 4 GSM Channels and 4 FXO Ports

**SETU VGFX8404** Multi-port VoIP Gateway with 8 VoIP Channels, 4 GSM Channels and 4 FXS Ports



#### Key Features

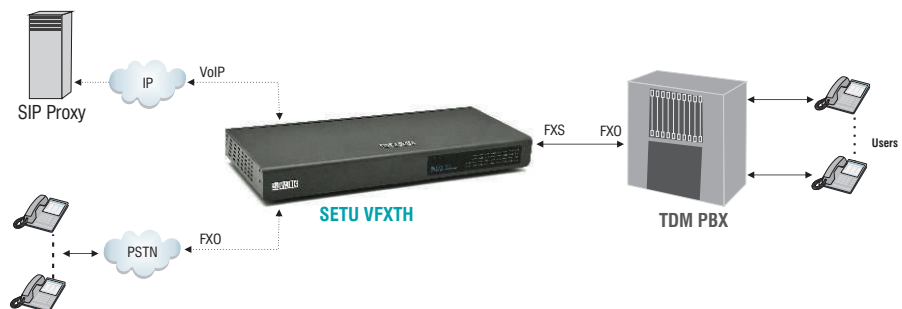
- Access Codes
- Automatic Number Translation
- Block Black-Listed Callers
- Call Detail Record (CDR)
- CLIP
- Do Not Disturb (DND)
- Fax over IP (T.38 and Pass-Through)
- IMEI Numbers
- Least Cost Routing
- Peer-to-Peer Calling
- PPPoE
- V-LAN Tagging
- NAT and STUN Support
- Incoming Calls Routing
- Returned Call to Original Caller (RCOC)
- Supplementary Services
- SIM PIN and PUK
- Quad-Band Support

### SETU VFXTH Multi-Port VoIP-FXO-FXS Gateway

Matrix presents SETU VFXTH- The 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 happens through the most cost effective network. It is available in 10 different configurations up to 32 FXO/FXS ports. SETU VFXTH is available in various configurations of FXO 8/16/24/32, FXS 8/16/24/32 and combination of FXO and FXS.



SETU VFXTH



#### Key Features

- 9 SIP Accounts
- Automatic Number Translation
- Call Detail Record (CDR)
- Call Progress Tones and Rings
- CLIP
- Conference
- CLI based Call Routing
- Day Light Saving Mode
- Digest Authentication
- Emergency Number Dialing
- Fax over IP (T.38 and Pass-Through)
- Hotline
- NAT and STUN Support
- Peer-to-Peer Calling Table
- PIN Authentication
- PPPoE
- Prefix to Domain Name Conversion
- System Log Client
- VLAN Tagging
- Web-based Programming



SETU VFX88L

### SETU VFX Multi-Port VoIP-FXS Gateway

Matrix SETU VFX is a feature-rich gateway offering IP connectivity with excellent audio quality for analog phones, legacy PBX systems and analog faxes. It is a compact, SIP based VoIP to FXS gateway suitable for any enterprise application. It supports 8 simultaneous VoIP calls. Flexible Routing, Call Control, Number Mapping and Call Detail Recording (CDR) are the key strengths of the SETU VFX. The flexible routing options of the SETU VFX make it a perfect choice as a terminal gateway. SETU VFX is available in two Configurations.

**SETU VFX44L** with 4 FXS Ports and 1 FXO (PSTN Pass-Through) Port

**SETU VFX88L** with 8 FXS Ports and 1 FXO (PSTN Pass-Through) Port

#### Key Features

- 1 FXO (PSTN Pass-Through) Port
- Multiple FXS Ports
- 9 SIP Accounts
- Call Control and Number Mapping
- Call Detail Recording and Reports
- Codec Selection: G.711, G.723.1, G.729AB, iLBC and GSM-FR
- DHCP, PPPoE, NAT and STUN
- Echo Cancellation: G.168 up to 128ms
- Emergency Number Dialing
- Fax over IP (T.38 and Pass-Through)
- Flexible Call Routing Options
- Peer-to-Peer Calling
- Supplementary Services
- Web Configuration

## VoIP ATA (ANALOG TELEPHONY ADAPTORS)



SETU ATA211G



SETU ATA211

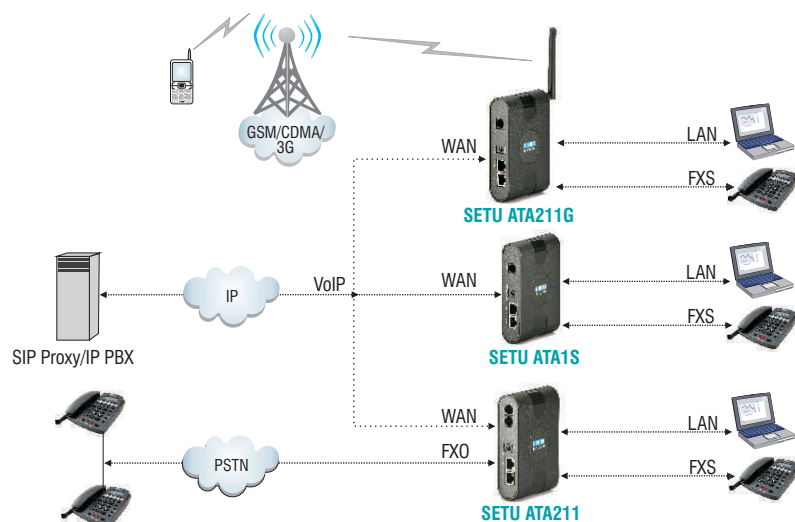
Matrix SETU ATA is a range of feature-rich Analog Telephone Adaptors and are designed to meet the requirements of converting the VoIP network to traditional telephony interfaces and vice versa. It gives you benefit of using VoIP and convenience of using existing telephony products and methods to reduce communication cost.

**SETU ATA211G** - SIP based Analog Telephone Adaptor with 3 SIP Accounts, 1 GSM, 1 FXS Port and 2 Ethernet Ports

**SETU ATA211** - SIP based FXO-FXS Gateway with 3 SIP Accounts, 1 FXO and 1 FXS Port with 2 Ethernet Ports

#### Key Features

- 3-Party Conference
- Auto Configuration
- Auto PSTN Fallback (SETU ATA211)
- CLIP
- Codec Selection: G.711, G.723.1, G.729AB
- DHCP Client
- Dial Plan
- Echo Cancellation: G.168 up to 32ms
- International Mobile Equipment Identity (IMEI) (SETU ATA211G)
- FXO Port (SETU ATA211)
- Incoming Calls Routing
- LED Indications
- MAC Cloning
- NAT and STUN
- Peer-to-Peer Calling
- Phone Book
- PIN Authentication
- PPPoE Client
- Programmable Call Progress Tones and Rings
- Quad-Band Support (SETU ATA211G)
- SIM PIN (SETU ATA211G)
- Syslog Client
- WAN & LAN Ports – Surf and Talk Simultaneously





SETU ATA2S



SETU ATA1S

**SETU ATA2S** - SIP based Analog Telephone Adaptor with 3 SIP Accounts, 2 FXS and 2 Ethernet Ports

**SETU ATA1S** - SIP based Analog Telephone Adaptor with 3 SIP Accounts, 1 FXS and 2 Ethernet Ports

#### Key Features

- 3-Party Conference
- Auto Configuration
- CLIP
- 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)
- Incoming Calls Routing
- MAC Cloning
- Multiple SIP Accounts
- NAT and STUN
- Password Protection
- Peer-to-Peer Calling
- Phone Book
- PPPoE Client
- Symmetric RTP
- Syslog Client
- Voice Activity Detection
- Web Configuration

## VoIP PHONES

### SETU VP SIP based VoIP Phones

Matrix SETU includes a range of feature-rich, executive IP Phones. They provide intuitive operation for the call management functions. Their standard SIP based design makes them compatible with any SIP infrastructure like Soft Switches, IP PBXs, Registrars and Proxies.

The SETU VoIP Phones offer WAN and LAN ports with routing. This makes them ideal for stand-alone applications requiring a PC to work with VoIP Phones. Full-duplex speaker phone, backlit LCD and capacity to handle multiple calls simultaneously are a few of the key strengths of these high-end VoIP Phones.

SETU VoIP Phones are available in four variants, each with two color options: Black and White.

**SETU VP248PE** with 6 Lines x 24 Characters LCD Display with PoE

**SETU VP248SE** with 2 Lines x 24 Characters LCD Display with PoE

**SETU VP248P** with 6 Lines x 24 Characters LCD Display

**SETU VP248S** with 2 Lines x 24 Characters LCD Display



SETU VP248PE

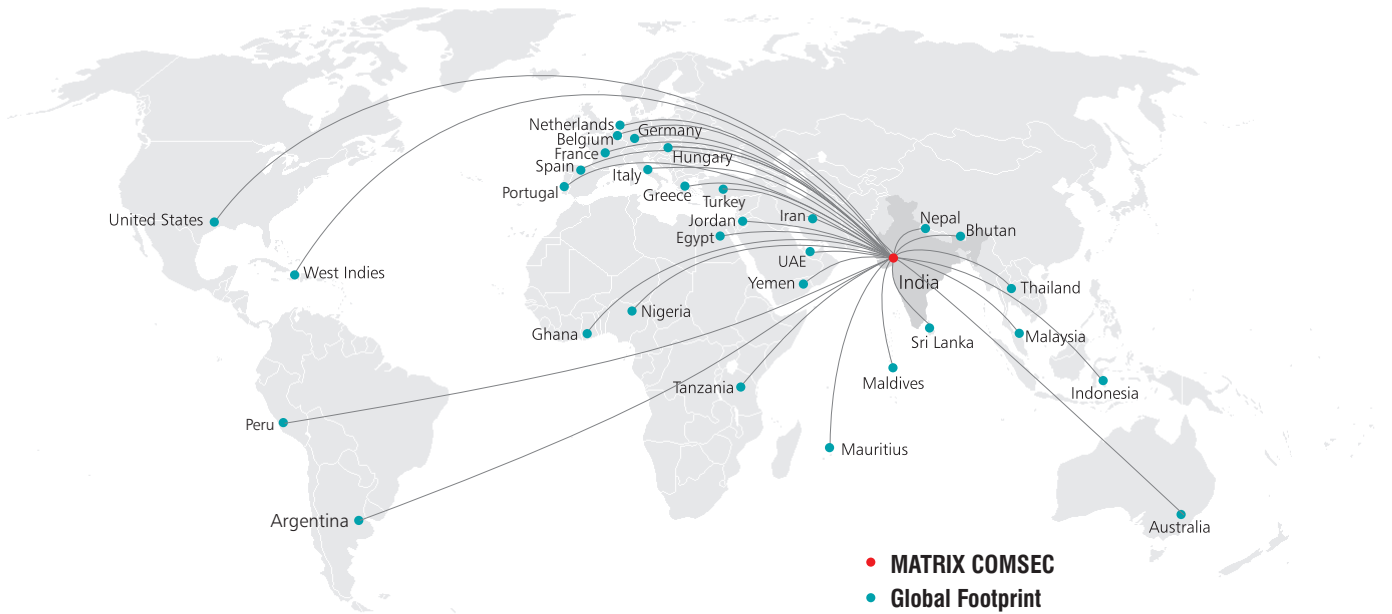


SETU VP248SE

#### Key Features

- 3 SIP Accounts
- 2 Ethernet Ports
- Programmable Keys
- Anonymous Call and Selective Call Rejection
- Auto Configuration
- Auto Answer with Headset Interface
- Conference
- DHCP, PPPoE, NAT and STUN
- Dialed, Received, Missed and Rejected Call Logs
- G.711, G.722, G.723, G.726 and G.729AB
- LAN and WAN Ports
- LDAP Client
- Least Cost Routing
- Message Wait Indication
- Multiple Call Handling (4 Calls)
- Multi-Lingual Display and GUI
- Peer-to-Peer Calling
- Phone Book with 100 Entries
- Ringer, Speech and LCD Controls
- Voice Mail Key
- Web Configuration

## MATRIX NETWORK



## MATRIX CUSTOMERS

Over the past 18 years, 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:

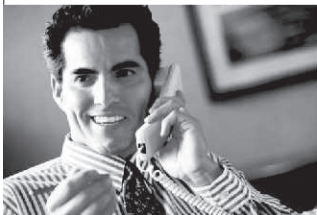
ABB  
 Alfa Laval  
 American Express  
 Bajaj Auto  
 Bayer  
 Bharat Petroleum  
 Blue Dart Express  
 Cadilla Pharma  
 Carrier Aircon  
 Dr. Reddy's Lab  
 Du-Pont  
 Garnier Laboratories

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  
 PriceWaterCoopers  
 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

An ISO 9001 Company, 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 telecom products like IP-PBX, Universal Gateways, VoIP Gateways and Terminals, GSM Gateways, Access Control and Time-Attendance Systems 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 more than 150,000 customers 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.*