

ETERNITY

Technical Specifications



BUILT-IN RESOURCES

| System Resources | Description | ETERNITY PE | | | ETERNITY GE | | | ETERNITY ME | |
|---------------------------------|--|-------------|-----|-----|-------------|----|-----|-------------|-----|
| | | 3SS | 3SP | 6SP | 3S | 6S | 12S | 10S | 16S |
| DKP Ports | Proprietary Digital Key Phones or DSS Consoles | - | - | - | - | - | - | 4 | 4 |
| RS232C (COM) Ports | SMDR/PMS/CAS Interfaces | - | 1 | 1 | 1 | 1 | 1 | 2 | 2 |
| Parallel Printer Port | Printer with Centronics Interface | - | - | - | - | - | - | 1 | 1 |
| USB Port | Reserved for Future Applications | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Analog Input Port (AIP) | External Music Source | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Analog Output Port (AOP) | Public Address System | - | 1 | 1 | 1 | 1 | 1 | 1 | 1 |
| Digital Input Port (DIP) | Sensor or Panic Switch | 1# | 1# | 1# | 1 | 1 | 1 | 1 | 1 |
| Digital Output Port (DOP) | Relay, Contactor, Door Lock | 3# | 3# | 3# | 1 | 1 | 1 | 1 | 1 |
| Conference | Number of Conference Participants | 6 | 6 | 15 | 15 | 15 | 15 | 21 | 21 |
| Voice Modules (16 Seconds Each) | Auto Attendant, Voice Help, Voice Tones | 6 | 6 | 6 | 16 | 16 | 16 | 16 | 16 |
| Ethernet Port | Web based Configuration, PMS, SMDR, System Log | 1 | 1 | 1 | 1 | 1 | 1 | 1 | 1 |

* Optional Connectivity

SYSTEM CAPACITY

| System Resources | Description | Maximum Ports | | | | | | | |
|---------------------------|--|---------------|-----|-----|-------------|-----|-----|-------------|------------|
| | | ETERNITY PE | | | ETERNITY GE | | | ETERNITY ME | |
| | | 3SS | 3SP | 6SP | 3S | 6S | 12S | 10S | 16S |
| Universal Slots | For Expansion Cards | 3 | 3 | 6 | 3 | 6 | 12 | 10 | 16 |
| SLT Ports | Single Line Analog Telephones | 24 | 24 | 48 | 60 | 120 | 240 | 320 | 512 |
| DKP/DSS Ports | Proprietary Digital Key Phones or DSS Consoles | 24 | 24 | 40 | 48 | 48 | 48 | 48 or 128* | 48 or 128* |
| TWT Ports | Two Wire Trunk (CO) Lines | 8 | 8 | 16 | 48 | 96 | 128 | 128 | 128 |
| BRI Ports | ISDN BRI Network or ISDN Compatible Devices | - | 6 | 12 | 12 | 24 | 32 | 32 | 32 |
| T1/E1/PRI Ports | T1 or E1 or ISDN PRI Network or Compatible Device | - | 3 | 6 | 3 | 6 | 8 | 8 | 8 |
| GSM/3G/CDMA Ports | GSM/3G/CDMA Network | 12 | 12 | 24 | 12 | 24 | 32 | 16 or 32* | 16 or 32* |
| VoIP Cards | VoIP Phones, Softphones, Mobile SIP Clients | 3 | 3 | 6 | 3 | 6 | 12 | 10 | 16 |
| VoIP Clients | Registration of VoIP Phones, Softphones and Mobile SIP Clients | 500 | 500 | 500 | 500 | 500 | 500 | 500 | 500 |
| VoIP Trunks | SIP Trunks (Clients) for ITSP or Peer-to-Peer | 32 | 32 | 32 | 32 | 32 | 32 | 32 | 32 |
| VoIP Channels per Card | Simultaneous VoIP Calls per Card | 16 | 16 | 16 | 32 | 32 | 32 | 32 | 32 |
| VoIP Calls | Simultaneous VoIP Call Participants | 48 | 48 | 96 | 96 | 192 | 384 | 320 | 512 |
| Door Phone Ports | Door Phone Connectivity (4-Wire) | 3 | 3 | 3 | - | - | - | - | - |
| E&M Ports | E&M Network | - | - | - | 12 | 24 | 48 | 80 | 128 |
| Voice Mail System | Voice Mail System with Auto-Attendant and 512 Mail Boxes | 16 | 16 | 16 | 16 | 16 | 16 | 16 | 16 |
| Magneto Trunk Ports | To Connect to Magneto Phones | - | - | - | - | - | - | 80 | 128 |
| Redundancy (Hot Stand-by) | Redundancy for DC Power Supply and Control Cards | - | - | - | - | - | - | Yes | - |
| Hot-Swap | Insertion and Removal of Cards in Power-On Condition | - | - | - | - | - | - | Yes | Yes |

* With PS48VDC - 500W

FEATURES LIST

- Abbreviated Dialing (Global & Personal)
- Access Codes (Programmable)
- Account Codes
- Account Codes (Forced)
- Alarm-Multiple
- Alarms (Time, Daily, Future Date & Time, Remote)
- Alarm-Snooze
- Allowed and Denied Lists
- Alternate Number Dialing
- Analog Input Port (AIP)
- Analog Output Port (AOP)
- Anonymous Call Rejection (SIP)
- Auto Call Back (Busy, No Reply)
- Auto DISA
- Auto Redial
- Auto-Attendant
- Automated Control Applications
- Background Music (DKP and SLT)
- Backup SMDR
- Backup-System Configuration
- Backup-System Software
- Barge-In
- Behind the PBX Applications
- Boss Ring
- Call Accounting System (CAS) Interface
- Call Back on Mobile Port
- Call Budget on Extensions
- Call Budget on Trunk
- Call Chaining
- Call Cost Calculation
- Call Cost Display
- Call Duration Control
- Call Follow Me
- Call Forward (Busy, No Reply, Dual Ring and to External Number)
- Call Park (General and Personal Orbit)
- Call Pick Up (Group and Selective)
- Call Progress Tones (Programmable)
- Call Splitting
- Call Taping
- Call Transfer (Screened, On Busy, While Ringing, Trunk to Trunk)
- Calling Line Identification & Presentation (CLIP)
- Calling Line Identity Restriction (CLIR)
- Cancel All Station Features
- Central Ringer
- Class of Service (COS)
- CLI based Routing
- Closed User Group (With/Without Exchange ID)
- Conference 15 Party
- Conference Multiple Participants
- Conference Dial-in
- Conflict Dialing
- Continued Dialing
- Conversation Recording
- Customer Emergency Services Identification Dialing (CESID)
- Customer Name
- Date and Time Format
- Daylight Saving Time
- Department Call
- Dialed Number Directory
- Digest Authentication (on SIP)
- Digital Input Port (DIP)
- Digital Output Port (DOP)
- Direct Dialing-In (DDI on T1/E1/PRI)
- Direct Inward Dialing (DID)
- Direct Inward System Access (DISA)
- Direct Outward System Access (DOSA)
- Direct Station Selection Console (DSS Console)
- Distinctive Rings
- Do-Not-Disturb (DND)
- Do-Not-Disturb (Remote)
- Door Phone Connectivity (ETERNITY PE)
- Dynamic DNS (DDNS)
- Dynamic Lock (Auto and Manual)
- E1 Connectivity
- E-mail Notification (VMS)
- Embedded Registrar and Proxy Servers (SIP Server)
- Emergency Calls Detection and Reporting
- Emergency Number Dialing
- Error Alarm
- External Call
- External Call Forward (ECF)
- External Music Port (AIP)
- Fax over IP (T.38 Relay and Pass-Through)
- Field Programmable
- File Transfer Protocol
- Flash Timer
- Flexible Numbers (Up to 6 Digits)
- Floor Service
- Forced Answer
- Forced Call Disconnection
- GPAX Application
- GPAX Billing
- Help Desk
- Hold
- Hot Desking
- Hot Outward Dialing (With/Without number, With/Without Delay)
- Hotel/Motel Features
- Hotel-Installation Wizard
- Hotline (Immediate and With Delay)
- Hunting/User Group
- Incoming Call Management
- Installation Wizard
- Internal Call
- Internal Call Restriction
- Interrupt Request
- ISDN-BRI Connectivity
- ISDN-PRI Connectivity
- Key Board Macro
- Last Caller Recall
- Last Number Redial
- Least Cost Routing (Number, Time and Service Provider to Service Provider, Carrier Pre-Selection)
- Live Call Screening
- Live Call Supervision
- Logical Partitioning
- Magneto Trunk Port (ETERNITY ME)
- Master Time Zone
- Maturity (Polarity Reversal, Delay, CPD)
- Meet Me Paging
- Menu based Command (DKP)
- Message Wait Indication (LED, Shattered Dial tone, Voice Message)
- Missed Calls
- Mobile Port (GSM/CDMA/3G Port)
- Music-On-Hold
- Mute
- Name Programming (Station, Trunk)
- NAT and STUN
- Network Selection (GSM)
- OFF-Hook Alert
- Operator (Single, Multiple)
- Override
- Paging (Internal and External)
- Parallel Printer Port (ETERNITY ME)
- Parallel Ringing
- Peer-to-Peer Calling
- PMS Interface
- Priority (Intercom and Trunk)
- Privacy
- Programmable Access Codes
- Programmable Call Progress Tones and Rings
- Programming the System (Using SLT, DKP, Ethernet Port, Serial Port, Jeeves)
- Public Address System Port
- QSIG (T1/E1/PRI)
- Quick Dial
- Raid
- Real Time Clock
- Real Time Clock Synchronization
- Region Code
- Remote alarm
- Remote Call forward
- Remote Programming
- Return Call to Original Caller (RCOC)
- Room Monitor
- Routing Group
- RS232C Port
- Security Dialing and reporting
- Selective Trunk Access
- Self Ring test
- SIP and RTP QoS
- Station groups
- Station In-Service/Out-Service
- Station Message Detail Recording (Incoming, Outgoing and Internal)
- Station Name
- Suite Services
- System Activity Log and Display
- System Administrator (SA) Mode
- System Debug
- System Engineer (SE) Mode
- System Fault Log
- System Security (Passwords)
- Time Tables
- Time Zone Display
- Toll Control
- Trunk Access Group
- Trunk Auto Answer
- Trunk Connectivity (BRI)
- Trunk Connectivity (GSM/CDMA/3G)
- Trunk Connectivity (PRI)
- Trunk Connectivity (PSTN)
- Trunk Connectivity (VoIP)
- Trunk Landing Group
- Trunk Parameters
- Trunk Reservation
- Upgrading the Software
- User Absent/Present
- Virtual Stations
- Voice Help
- Voice Mail Integration
- Voice Message Applications
- Voice Prompts for Tones
- VoIP Calling
- Walk-In Class of Service (Single / Multiple calls)
- Web based Programming

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 | : 1200Ω |
| 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 ISDN1) France Vnx |
| Protection | : Solid State (Over Voltage and Over Current) Built- in Secondary Protection |
| Physical Connector | : RJ48 (120Ω) |

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 |
| Supplementary Services | : QSIG ECMA |
| Physical Connector | : RJ45 (Impedance Selectable) |

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 | : I.431, G.732, ETSI 300-233 |
| Protection | : Solid State (Over Voltage and Over Current) Built-in Secondary Protection |
| Physical Connector | : RJ45 (Impedance Selectable) |

T1 BBS

| | |
|--------------------|---|
| Bit Rate | : 1544 kbps +/- 50 ppm |
| Line Coding | : AMI and B8ZS |
| Framing | : D4, ESF |
| Line Signaling | : FXS Loop Start, FXO Loop Start, FXS Ground Start, FXO Ground Start, E&M (Immediate, Wink Start, Wink Start FGD) |
| Digit Dialing | : DTMF |
| Alarms | : ANSI T1.231 |
| Performance | : ANSI T1.403, ANSI T1.231, AT&T TR54016 |
| Protection | : Solid State (Over Voltage and Over Current) Built-in Secondary Protection |
| Physical Connector | : RJ45 (Impedance Selectable) |

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 -102dBm |
| Protocol | : AT Command Interface |
| External Antenna | : One Antenna per 4 GSM Ports, 1.8/3.0 dBi, 50Ω SMA (Male) Connector, Omni Directional with Cable of 3 Meters Length |

3G

| | |
|--------------------|--|
| GSM Band (MHz) | : Quad-Band: GSM850, EGSM900, DCS1800, PCS1900 Tri-Band: WCDMA 850/1900/2100 |
| Compliant | : ETSI GSM Phase 2/2+ |
| SIM Card | : One SIM Per GSM Port |
| SIM Interface | : 1.8V, 3V |
| Transmission Power | : Class 4 (2W) at GSM850 MHz and EGSM900 MHz Band, Class 1 (1W) at DCS 1800 MHz and PCS1900 MHz Band, Class 3 (0.25W) at WCDMA 850/1900/2100 MHz Band |
| RF Sensitivity | : Better than -106dBm at GSM850, EGSM900, DCS1800, and PCS1900, Better than -106 dBm at WCDMA 850, Better than -106dBm at WCDMA 1900/2100 |
| Protocol | : AT Command Interface |
| External Antenna | : One Antenna per 4 3G GSM Ports, 1.8/3.0*dBi, 50Ω SMA (Male) Connector, Omni Directional With Cable of 3 Meters Length |

CDMA

| | |
|--------------------|--|
| CDMA Band (MHz) | : Programmable; Cellular A+B, Cellular A and Cellular B, 800 MHz |
| RUIIM Card | : One RUIIM per CDMA Port |
| RUIIM Interface | : 3 V |
| Transmission Power | : Class 0 (0.4W) at Cellular 834- 894 MHz Band |
| RF Sensitivity | : Better than -104dBm at Cellular 834-894 MHz Band |
| Protocol | : AT Command Interface |
| External Antenna | : One Antenna per 4 3G CDMA Ports, 1.8/3.0*dBi, 50Ω SMA (Male) Connector, Omni Directional With Cable of 3 Meters Length |

VoIP

| | |
|------------------------|--|
| VoIP Protocols | : SIP v2, SIP over TCP, Symmetric RTP, RTCP, 100rel/PRACK |
| Network Protocol | : IPv4, TCP, UDP, SNTP, STUN, ARP, ICMP, PPP, DNS, SMTP |
| SIP | : Maximum 32 SIP Accounts Per System, Out Bound Proxy Support, Display Name, User Name, password, URL, Proxy URL, Register Interval |
| Line Echo Cancellation | : G.168 With 64/128ms Tail Length |
| Voice | : Dynamic Jitter Buffer (Adaptive), Comfort Noise Generation and Voice Activity Detection |
| NAT | : STUN and NAT Keep Alive |
| Voice CODECs | : G.711 (A-law, μ-Law), G.723, G.729AB, GSM-FR, GSM-EFR and iLBC |
| Call Progress Tones | : Dial tone, Ring Back Tone, Busy Tone, Error Tone |
| Fax | : T.38 Relay and Pass Through |
| Quality of Service | : SIP QoS and RTP QoS |
| Security | : MD5 Authentication for SIP, Password Protected Configuration by Admin and User |
| Data Network | : Ethernet (RJ45) Port, Auto MDIX (10/100 base T) |
| LED Indications | : 1-LED for System Status and 1-LED for Registrar Status |

Auxiliary Ports (ETERNITY GE and ETERNITY ME)

| | |
|---------------------|--|
| 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 VDC, IDC Max = 0.15 A, Push-Type Connector |

Auxiliary Ports (ETERNITY PE)

| | |
|--------------------------------------|---|
| Analog Input Port (Premium Only) | : 0.7 Vrms, Isolated, Audio Jack Connector (3.5mm) |
| Analog Output Port (Premium Only) | : 0.7 Vrms, Isolated, Audio Jack Connector (3.5mm) |
| Digital Input Port (Optional) | : Loop Current 13mA, Max. Cable Length-Up to 1000Ω, RJ45 |
| Digital Output Port (Optional) | : Power Relay, Resistive Load 1.5A 120VAC/150VDC, Operation Time : 8ms (Max.), RJ45 |
| Door Phone Port (Optional) | : Speaker Output 1.41Vrms (Max.), Microphone Input 1.34Vrms (Max.), RJ45 |

* Depends on GSM Frequency Band

POWER SUPPLY

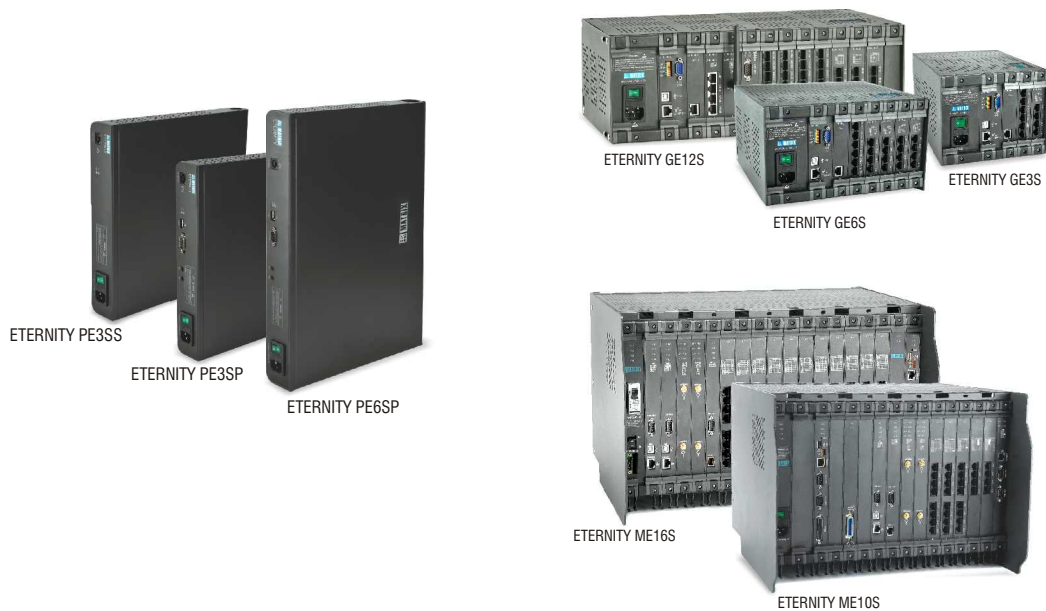
| PRODUCT | ETERNITY PE | ETERNITY GE | ETERNITY ME |
|-----------------------------|---|------------------------------|--------------------------|
| Input | Option 1 (Mains): 100-240 VAC, 47-63 Hz | | |
| | – | Option 2 (DC): 48VDC +/- 20% | |
| Power Consumption (Typical) | 3SS - 25W | 3S - 25W | 10S - 70W |
| | 3SP - 25W | 6S - 30W | 16S - 100W |
| | 6SP - 40W | 12S - 50W | – |
| LED Indications | 2 LEDs for System Status | 2 LEDs for System Status | 3 LEDs for System Status |

ENVIRONMENTAL

| | |
|-----------------------|----------------------------------|
| 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

| Specifications | | Dimension (WxHxD) | Unit Weight | Shipping Weight | Installation |
|----------------|-----|--|------------------|------------------|---|
| Variants | | | | | |
| ETERNITY PE | 3SS | 29.8x5.2x30.0cm 11.73"x2.04"x11.8" | 1.55kg (3.41lbs) | 4.0kg (8.8lbs) | Wall Mount Table Top |
| | 3SP | 29.8x5.2x30.0cm 11.73"x2.04"x11.8" | 1.57kg (3.45lbs) | 4.2kg (9.2lbs) | Wall Mount Table Top |
| | 6SP | 43.9x5.2x30.0cm 17.28"x2.04"x11.8" | 2.51kg (5.52lbs) | 4.9kg (10.8lbs) | Wall Mount, Table Top 19" Rack Mount |
| ETERNITY GE | 3S | 18.0x16.0x25.4cm 7.04"x6.29"x10.0" | 1.5kg (3.3lbs) | 4.5kg (9.9lbs) | Wall Mount Table Top |
| | 6S | 26.0x16.0x25.4cm 10.24"x6.29"x10.0" | 3.5kg (7.7lbs) | 6.5kg (14.3lbs) | Wall Mount Table Top |
| | 12S | 41.2x16.0x25.4cm 16.22"x6.29"x10.0" | 6.5kg (14.3lbs) | 9.5kg (20.9lbs) | Wall Mount, Table Top 19" Rack Mount |
| ETERNITY ME | 10S | 48.2x33.0x39.9cm 19.0"x12.9"x15.55" | 8.3kg (18.3lbs) | 12.3kg (27.1lbs) | Wall Mount, Table Top 19" Rack Mount |
| | 16S | 52.3x33.0x39.9cm 20.5"x12.9"x15.55" | 10.5kg (23.1lbs) | 15.0kg (33.0lbs) | Wall Mount Table Top |



COMPLIANCES

| | | | | |
|--|--|--|--------------------------------------|--------------------------------------|
| EMI/EMC | Conducted Emission : CISPR 22 | TEC | IR/IPX-01/03 APR2005 | |
| | Radiated Emission : CISPR 22 | | EC Directives | R&TTE 1999/5/EC |
| | Harmonic Current Emission : IEC 61000-3-2 | | | LVD 73/23/EEC |
| | Voltage Flicker : IEC 61000-3-3 | | | EMC 89/336/EEC |
| Electro-static Discharge : IEC 61000-4-2 | | Safety | IEC 60950:2001 First Edition | |
| Radiated Susceptibility : IEC 61000-4-3 | | | Environment Test | Cold Test : IS:9000 Part 2/Section 4 |
| Electrical Fast Transient : IEC 61000-4-4 | | Dry Heat Test : IS:9000 Part 3/Section 5 | | |
| Surge : IEC 61000-4-5 | | Damp Test : IS:9000 Part 5/Section 1 | | |
| Conducted Immunity : IEC 61000-4-6 | | Mechanical | Vibration Test : IEC 600068-2-6:2007 | |
| Power Frequency Magnetic Field : IEC 61000-4-8 | | | Shock Test : IEC 68-2-27 | |
| Voltage Interruption and Dips : IEC 61000-4-11 | | | | |
| FCC | Conducted Emission: FCC Part 15 Sub Part B | | | |
| FCC68 | Radiated Emission: FCC Part 15 Sub Part B | | | |
| | US:MTXMF01BETERNITY | | | |

EXPANSION CARDS

| ETERNITY PE | |
|-----------------|--|
| Expansion Cards | Description |
| ETERNITY PE3SS | IP-PBX with 3 Universal Slots |
| ETERNITY PE3SP | IP-PBX with 3 Universal Slots |
| ETERNITY PE6SP | IP-PBX with 6 Universal Slots |
| SLT8 | 8 Single Line Telephones |
| DKP8 | 8 Digital Key Phones |
| DKP2+SLT6 | 2 Digital Key Phones and 6 Single Line Telephones |
| DKP4+SLT4 | 4 Digital Key Phones and 4 Single Line Telephones |
| TWT2+DKP2+SLT4 | 2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 4 Single Line Telephones |
| TWT4+SLT4 | 4 Two Wire Trunk (CO) Lines and 4 Single Line Telephones |
| TWT4+DKP4 | 4 Two Wire Trunk (CO) Lines and 4 Digital Key Phones |
| TWT8 | 8 Two Wire Trunk (CO) Lines |
| BRI2 | 2 ISDN BRI Lines or ISDN Compatible Devices |
| T1/E1/PRI | T1/E1/PRI Line or Compatible Device with QSIG Support |
| GSM4 | 4 GSM SIMs for GSM Network Connectivity |
| GSM2 | 2 GSM SIMs for GSM Network Connectivity |
| VoIP16 | IP-PBX Card having Server and Trunks Personalities for 16 Concurrent Calls |
| VoIP8 | IP-PBX Card having Server and Trunks Personalities for 8 Concurrent Calls |
| Door Phone Card | 1 Digital Input Port, 3 Digital Output Ports and 3 Door Phones (4-Wire) |
| VMS16 | 16 Port Voice Mail System with 512 Mail Boxes to give Voice Mail Box Facility to PBX users |

| ETERNITY GE | |
|-----------------|--|
| Expansion Cards | Description |
| ETERNITY GE3S | IP-PBX with 3 Universal Slots |
| ETERNITY GE6S | IP-PBX with 6 Universal Slots |
| ETERNITY GE12S | IP-PBX with 12 Universal Slots |
| SLT20 | 20 Single Line Telephones |
| SLT8 | 8 Single Line Telephones |
| DKP16 | 16 Digital Key Phones |
| DKP8 | 8 Digital Key Phones |
| DKP4+SLT16 | 4 Digital Key Phones and 16 Single Line Telephones |
| TWT4+DKP2+SLT12 | 4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 12 Single Line Telephones |
| TWT2+DKP2+SLT16 | 2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 16 Single Line Telephones |
| TWT2+DKP2+SLT8 | 2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 8 Single Line Telephones |
| TWT8+SLT8 | 8 Two Wire Trunk (CO) Lines and 8 Single Line Telephones |
| TWT4+SLT16 | 4 Two Wire Trunk (CO) Lines and 16 Single Line Telephones |
| TWT16 | 16 Two Wire Trunk Lines (CO) |
| TWT8 | 8 Two Wire Trunk Lines (CO) |
| BRI4 | 4 ISDN BRI Lines or ISDN Compatible Devices |
| T1E1PRI SINGLE | T1/E1/PRI Line or Compatible Device with QSIG Support |
| GSM4 | 4 GSM SIMs for GSM Network Connectivity |
| VoIP32 | IP-PBX Card having Server and Trunks Personalities for 32 Concurrent Calls |
| VoIP16 | IP-PBX Card having Server and Trunks Personalities for 16 Concurrent Calls |
| E&M4 | To Connect to 4 E&M Lines |
| VMS16 | 16 Port Voice Mail System with 512 Mail Boxes to give Voice Mail Box facility to PBX users |

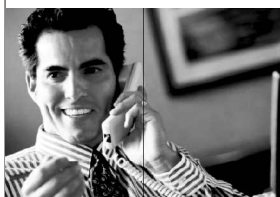
ETERNITY ME

| | |
|------------------------|--|
| ETERNITY ME10S | IP-PBX with 10 Universal Slots |
| ETERNITY ME16S | IP-PBX with 16 Universal Slots |
| Expansion Cards | Description |
| SLT32 | 32 Single Line Telephones |
| SLT16 | 16 Single Line Telephones |
| SLT8 | 8 Single Line Telephones |
| DKP32 | 32 Digital Key Phones |
| DKP16 | 16 Digital Key Phones |
| DKP8 | 8 Digital Key Phones |
| TWT8+SLT24 | 8 Two Wire Trunk (CO) Lines and 24 Single Line Telephones |
| TWT16 | 16 Two Wire Trunk (CO) Lines |
| TWT8 | 8 Two Wire Trunk Lines (CO) |
| BRI8 | 8 ISDN BRI Lines or ISDN Compatible Devices |
| BRI4 | 4 ISDN BRI Lines or ISDN Compatible Devices |
| T1E1PRI DUAL | 2(Dual) T1/E1/PRI Lines or Compatible Devices with QSIG Support |
| T1E1PRI SINGLE | T1/E1/PRI Line or Compatible Device with QSIG Support |
| GSM8 | 8 GSM SIMs for GSM Network Connectivity |
| GSM4 | 4 GSM SIMs for GSM Network Connectivity |
| VoIP32 | IP-PBX Card having Server and Trunks Personalities for 32 Concurrent Calls |
| VoIP16 | IP-PBX Card having Server and Trunks Personalities for 16 Concurrent Calls |
| E&M8 | 8 E&M Lines |
| E&M4 | 4 E&M Lines |
| MAGNETO8 | 8 Magneto Phones |
| VMS16 | 16 Port Voice Mail System with 512 Mail Boxes to give Voice Mail Box facility to PBX users |

User Terminals (Common to ETERNITY PE, GE and ME)

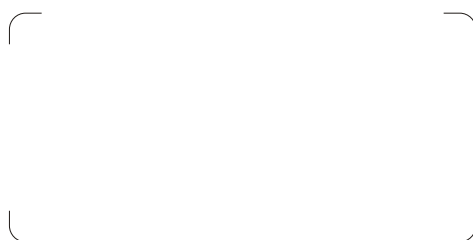
| | |
|----------------------------|--|
| EON42S (Black/White) | Digital Key Phone; 2x24 LCD with Swivel, Backlit and Contrast Control and 24 Programmable Keys |
| EON48S (Black/White) | Digital Key Phone; 2x24 LCD with Swivel, Backlit and Contrast Control, 17 Touch Sense and 16 Programmable Keys |
| EON48P (Black/White) | Executive Digital Key Phone; 6x24 LCD with Swivel, Backlit and Contrast Control, 17 Touch Sense and 16 Programmable Keys |
| DSS16X4 (Black/White) | DSS Console with 64 Direct Station Selection Keys. An Attachment to EON48S and EON48P |
| DSS72 (Black/White) | DSS Console with 72 Direct Station Selection Keys. An Attachment to EON42S |
| EONSOFT | PC based Digital Key Phone with built-in two PC based DSS64 (64 DSS Keys) |
| SETU VP236S (Black/White) | Executive IP-Phone with 2x24 Swivel LCD Display |
| SETU VP236SE (Black/White) | Executive IP-Phone with 2x24 Swivel LCD Display and PoE |
| SETU VP248SE (Black/White) | Executive IP-Phone with 2x24 Swivel LCD Display, 17 Touch Sense Keys and PoE |
| SETU VP248PE (Black/White) | Executive IP-Phone with 6x24 Swivel LCD Display, 17 Touch Sense Keys and PoE |

■ ABOUT MATRIX



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.

For further information contact:



MATRIX COMSEC PVT. LTD.

394-GIDC, Makarpura,
Vadodara-390010, India.
Phone: +91 265 2630555
Fax: +91 265 2636598
Email: Inquiry@MatrixComSec.com
www.MatrixComSec.com
SMS 'MATRIX' to 99987 55555