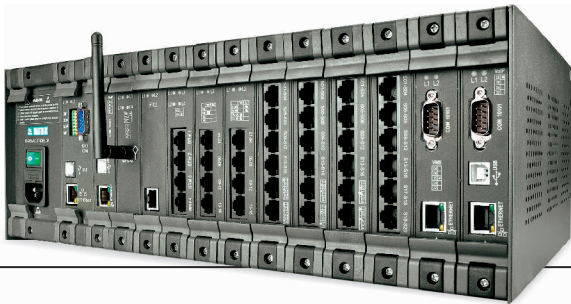# ETERNITY
Technical Specifications

■ 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	32	48	48	48	64 or 128*	64 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	8	8	8	12	24	32	24 or 64*	24 or 64*
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	50	50	50	500	500	500	1000	1000
VoIP Trunks	SIP Trunks (Clients) for ITSP or Peer-to-Peer	4	4	4	16	16	16	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	80	96	192	384	320	512
Door Phone Ports	Door Phone Coonectivity (4-Wire)	3	3	3	–	–	–	–	–
E&M Ports	E&M Network	–	–	–	12	24	48	80	128
Voice Mail System (Number of Ports)	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

Standard Features (Built-In)

- Abbreviated Dialing (Global & Personal)
- Access Codes (Programmable)
- Access 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 Redial
- Auto-Attendant
- Automated Control Applications
- Background Music (DKP and SLT)
- Backup SMDR
- Backup-System Configuration
- Backup-System Software
- Barge-In
- Boss Ring
- Call Chaining
- 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
- Class of Service (COS)
- CLI based Routing
- Conflict Dialing
- Continued Dialing
- Conversation Recording
- Date and Time Format
- Daylight Saving Time (DST)
- Day-Night Mode
- Department Call
- 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)
- Dual Ring
- Dynamic DNS (DDNS)
- Dynamic Lock (Manual)
- E-mail Notification (VMS)
- Embedded Registrar and Proxy Servers
  (SIP Server)
- Emergency Calls Detection and Reporting
- Emergency Number Dialing
- External Call

- External Call Forward (ECF)
- External Music Port (AIP)
- Fax over IP (T.38 Relay and Pass-Through)
- File Transfer Protocol
- Flexible Numbers (Up to 6 Digits)
- Forced Answer
- Help Desk
- Hold
- Hot Desking
- Hot Outward Dialing (With/Without number,
  With/Without Delay)
- Hotline (Immediate and With Delay)
- Hunting/User Group
- Incoming Call Management
- Installation Wizard
- Internal Call
- Internal Call Restriction
- Interrupt Request
- Last Caller Recall
- Last Number Redial
- Least Cost Routing (Number, Time and Service
  Provider to Service Provider, Carrier Pre-Selection)
- Live Call Screening (VMS)
- Live Call Supervision
- Logical Partitioning
- 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/3G/CDMA Port)
- Music-On-Hold
- Mute
- Name Programming (Station, Trunk)
- NAT and STUN (VoIP)
- Network Selection (GSM)
- OFF-Hook Alert (DKP)
- Operator (Single, Multiple)
- Override
- Paging (Internal and External)
- Parallel Printer Port (ETERNITY ME)
- Peer-to-Peer Calling
- Priority (Intercom and Trunk)
- Privacy
- Programmable Access Codes
- Programmable Call Progress Tones and Rings
- Programming the System
  (Using SLT, DKP, Ethernet Port)
- Public Address System Port
- Quick Dial
- Raid
- Real Time Clock
- Region Selection
- Remote Alarm
- Remote Call Forward
- Remote Programming
- Room Monitor
- Routing Group
- RS232C Port
- Security Dialing and Reporting
- Selective Trunk Access
- Self Ring Test
- SIP and RTP QoS (VoIP)
- Station Groups
- Station Message Detail Recording
  (Incoming, Outgoing and Internal - 200 each)
- Station Name
- System Activity Log and Display
- System Administrator (SA) Mode
- System Engineer (SE) Mode

- System Fault Log
- System Security (Password)
- Time Tables
- Time Zone Display
- Toll Control
- Trunk Access Group
- Trunk Auto Answer
- Trunk Connectivity (BRI)
- Trunk Connectivity (GSM/3G/CDMA)
- Trunk Connectivity (T1/E1/ISDN PRI)
- Trunk Connectivity (TWT or CO)
- Trunk Connectivity (VoIP)
- Trunk Reservation
- Upgrading the Software
- User Absent/Present
- Virtual Stations
- Voice Mail Integration
- Voice Message Applications
- Voice Prompts for Tones
- Walk-In Class of Service (Single/Multiple calls)
- Web based Programming

Licensed Features

Premium Features License
- Call Budget on Extensions
- Call Budget on Trunk
- Call Cost Calculation
- Closed User Group (With/Without Exchange ID)
- Conference Dial-in
- Conference – Multiple Participants
- Multi-Stage Dialing
- Online SMDR
- SMDR Posting (Call Accounting System Interface)

Mobility Features License
- Call Back on Mobile Port
- Manual BTS Selection
- Mobile Extension (CLI based DISA)
- Return Call to Original Caller (RCOC)
- Scheduled Call Forward
- SIM Balance Inquiry
- SIM Recharge

Hospitality Features License
- Check-In
- Check-Out
- Floor Service
- Room Clean Status
- Room Occupancy Status
- Room Shift

Gateway Feature License
- Universal Gateway Application
  (Automatic Call Routing between Networks)

QSIG License
- QSIG on T1/E1/PRI

PMS License
- Requires Hospitality License Pre-activated

PLCC Features License
- CCS Signaling
- Express Signaling
- Seizure Signaling
- Release Pulse Signaling

IP Users License
- License to enable IP Users
- IP10: ETERNITY PE, ETERNITY GE and ETERNITY ME
- IP50: ETERNITY GE and ETERNITY ME

■ 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 RBS

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
RUIM Card	: One RUIM per CDMA Port
RUIM 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 baseT)
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, 5mA, Push-Type Connector
Digital Output Port	: VDC Max = 60VDC, IDC Max = 0.15A, 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

		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℃ to +50℃ (14℉ to122℉)
Operating Humidity	5-95% RH, Non-Condensing
Storage Temperature	-40℃ to +85℃ (-40℉ to +185℉)
Storage Humidity	0-95% RH, Non-Condensing

■ MECHANICAL

Variants	Specifications	Dimension (WxHxD)	Unit Weight	Shipping Weight	Installation
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

ETERNITY PE3SS

ETERNITY PE3SP

ETERNITY PE6SP

ETERNITY GE12S

ETERNITY GE6S

ETERNITY GE3S

ETERNITY ME16S

ETERNITY ME10S
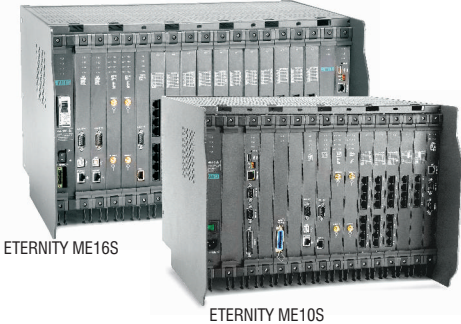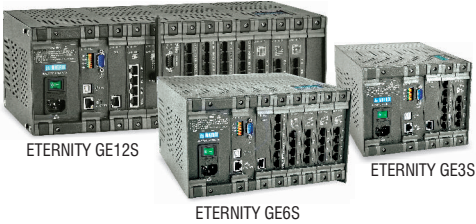
■ COMPLIANCES

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

## ■ EXPANSION CARDS

ETERNITY PE	
ETERNITY PE3SS	IP-PBX with 3 Universal Slots
ETERNITY PE3SP	IP-PBX with 3 Universal Slots
ETERNITY PE6SP	IP-PBX with 6 Universal Slots
Expansion Cards	**Description**
SLT8	8 Single Line Telephones
SLT4	4 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
TWT2+SLT6	2 Two Wire Trunk (CO) Lines and 6 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	
ETERNITY GE3S	IP-PBX with 3 Universal Slots
ETERNITY GE6S	IP-PBX with 6 Universal Slots
ETERNITY GE12S	IP-PBX with 12 Universal Slots
Expansion Cards	**Description**
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 VP248S (Black/White)	Executive IP-Phone with 2x24 Swivel LCD Display, 17 Touch Sense Keys
SETU VP248P (Black/White)	Executive IP-Phone with 6x24 Swivel LCD Display, 17 Touch Sense Keys
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
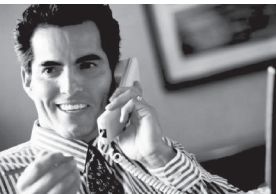
■ ABOUT MATRIX

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 footprints 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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