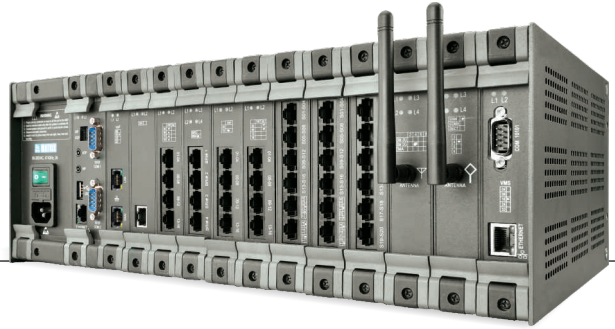# ETERNITY
Technical Specifications

BUILT-IN RESOURCES

System Resources	Description	ETERNITY PE 6SP	ETERNITY GE 6S	ETERNITY GE 12S	ETERNITY ME 16S	ETERNITY LE
DKP Ports	Proprietary Digital Key Phones or DSS Consoles	–	–	–	4	4
RS232C (COM) Ports	SMDR/PMS/CAS Interfaces	1	2	2	2	2
USB Port	Reserved for Future Applications	1	1	1	1	1
Analog Input Port (AIP)	External Music Source	1	1	1	1	1
Analog Output Port (AOP)	Public Address System	1	1	1	1	1
Digital Input Port (DIP)	Sensor or Panic Switch	–	1	1	1	–
Digital Output Port (DOP)	Relay, Contactor, Door Lock	–	1	1	1	–
Conference	Number of Conference Participants	15	15	15	21	45*
Voice Messages (16 seconds each)	Auto Attendant, Voice Help, Voice Tones	6	16	16	16	16
Ethernet Port	Web based Configuration, PMS, SMDR, System Log	1	1	1	1	1

* Max. 21 Participants in Single Conference

SYSTEM CAPACITY

System Resources	Description	Maximum Ports				
		ETERNITY PE 6SP	ETERNITY GE 6S	ETERNITY GE 12S	ETERNITY ME 16S	ETERNITY LE
Universal Slots	For Expansion Cards	6	6	12	16	28
SLT Ports	Single Line Analog Telephones	48	120	240	320/512*	1344#
DKP/DSS Ports	Proprietary Digital Key Phones or DSS Consoles	32	96	96	64/128*	128
CO (TWT) Ports	Two Wire Trunk (CO) Lines	16	64	64	128	128
BRI Ports	ISDN BRI Network or ISDN Compatible Devices	12	24	32	32	32
T1/E1/PRI Ports	T1 or E1 or ISDN PRI Network or Compatible Device	6	6	8	8	24
GSM/3G Ports	GSM/3G Network	8	24	40	64	128
VoIP Cards	VoIP Phones, Softphones, Mobile SIP Clients	6	6	10	16	16
VoIP Users	Registration of VoIP Phones, Softphones and Mobile SIP Clients	50	500	500	999	999
VoIP Trunks	SIP Trunks (Clients) for ITSP or Peer-to-Peer	16	16	16	32	32
VoIP Channels per Card	Simultaneous VoIP Calls per Card	8/16	16/32	16/32	16/32	16/32
E&M Ports	E&M Network	–	24	32	128	128
Voice Mail System (Number of Ports)	Voice Mail System with Auto-Attendant and with deidicated Mailbox for each type of extension (Analog, Digital, IP)	16	16	16	16	16
Magneto Phone Ports	To Connect to Magneto Phones	–	16	16	128	128
Hot-Standby	Redundancy for DC Power Supply and Control Cards	–	–	–	Yes#	Yes#
Hot-Swap	Insertion and Removal of Cards in Power-On Condition	–	–	–	Yes	Yes

#Built-in 4 CPU DKP Ports are Non Redundant   *With PS48VDC - 500W
#For redundancy, the equivalent software license (apart from primary CPU) is to be procured additionally

FEATURES LIST

Standard Features (Built-In)

- Abbreviated Dialing (Global & Personal)
- Access Codes (Programmable)
- Account Codes (Forced)
- Alarm-Multiple
- Alarms
- 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 Budget on Extensions
- Call Budget on Trunks
- Call Chaining
- Call Cost Calculation
- 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
- Closed User Group (With/Without Exchange ID)
- Computer Telephony Integration (CTI)
- Conference Dial-in
- Conference – Multiple Participants
- 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 Conference
- 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 & 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
- Missed Calls
- Music-On-Hold
- Mobile Port (GSM/3G Port)
- Multi-Stage Dialing
- Mute
- Name Programming (Station, Trunk)
- NAT and STUN (VoIP)
- Network Selection (GSM)
- Off-Hook Alert (DKP)
- Online SMDR
- Operator (Single, Multiple)
- Override
- Paging (Internal and External)
- Peer-to-Peer Calling
- Priority (Intercom and Trunk)
- Privacy
- 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
- Return Call to Original Caller (RCOC)
- Room Monitor

- Routing Group
- RS232C Port
- SMDR Posting (Call Accounting System Interface)
- SMS Gateway
- SMS Server
- Security Dialing and Reporting
- Selective Trunk Access
- Self Ring Test
- SIP and RTP QoS (VoIP)
- Station Groups
- Station Message Detail Record - 12000 Records)
- 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)
- 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 Message Applications
- Voice Prompts for Tones
- Walk-In Class of Service (Single/Multiple calls)
- Web based Programming

Licensed Features

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

PMS License
- For Third-Party PMS Integration (Required Hospitality Features License Pre-activated)

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

QSIG License
- QSIG on T1/E1/PRI

- **IP Users License**: License to Enable IP Users
- IP5: ETERNITY PE, ETERNITY GE, ETERNITY ME and ETERNITY LE
- IP10: ETERNITY PE, ETERNITY GE, ETERNITY ME and ETERNITY LE
- IP50: ETERNITY GE, ETERNITY ME and ETERNITY LE

Computer Telephony Integration License
SMS Gateway License
SMS Server License

TECHNICAL SPECIFICATIONS

Technology

Type of Switching	: IP & PCM/TDM Digital Switching (100% Non-Blocking)
Processor	: 32-bit RISC
Architecture	: Distributed Processing
Slots	: Universal

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

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 (Centronix for ETERNITY LE Card SLT48)

CO (TWT - Two 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 ISDN 1) France VNx
Protection	: Solid State (Over Voltage and Over Current) Built-in Secondary Protection
Physical Connector	: RJ45 (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), QSIG 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 and WCDMA 900/1900/2100
Compliant	: ETSI GSM Phase 2/2+
SIM Card	: One SIM Per GSM Port
SIM Interface	: 1.8V, 3V
Transmission Power	: Output Power GSM850/GSM900: Class 4 (2W) DCS1800/PCS1900: Class 1 (1W) UMTS850/900/1900/2100: Class 3 (0.25W)
RF Sensitivity	: < -106dBm at GSM850, EGSM900, DCS1800, PCS1900 < -108dBm at WCDMA2100, WCDMA1900 < -106dBm at WCDMA850
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

VoIP

VoIP Protocols	: SIP v2, SIP over TCP, Symmetric RTP, RTCP, 100rel/PRACK
Network Protocol	: IPv6#, 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	: SRTP/TLS over SIP, MD5 Authentication for SIP, AES128 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

E&M

E&M Signaling	: Type IV (Originated on E-lead or on M-lead) and Type V
Speech Interface	: 2-Wire or 4-Wire
Trunk Seizure Type	: Immediate, Immediate+Wink, Seizure Pulse, Seizure Pulse+Wink, Express, Compander Control Signal (CCS)
Signaling	: Pulse Dial - Pulse 10PPS, Pulse 20PPS Tone Dial - DTMF
AC Impedance	: 600Ω
Return Loss	: 20 dB
Transhybrid Loss	: 20 dB against Configurable Balance of 600Ω or AT&T Complex Impedance
Transmit Gain	: +/- 1 dB
Receive Gain	: +/- 1 dB
Physical Connector	: RJ45

Auxiliary Ports

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

Combat Net Radio (Radio Interface Card-ETERNITY GE, ME and LE)

Line Inputs	: Balanced, transformer isolated 1Vrms, 600 ohm
Line Outputs	: Balanced, transformer isolated 1Vrms, 600 ohm
PTT Output	: Opto-Isolated Normally OPEN, 1A max
Physical Connector	: RJ45

Depends on GSM Frequency Band

#*ETERNITY V12R5 Onwards*

POWER SUPPLY

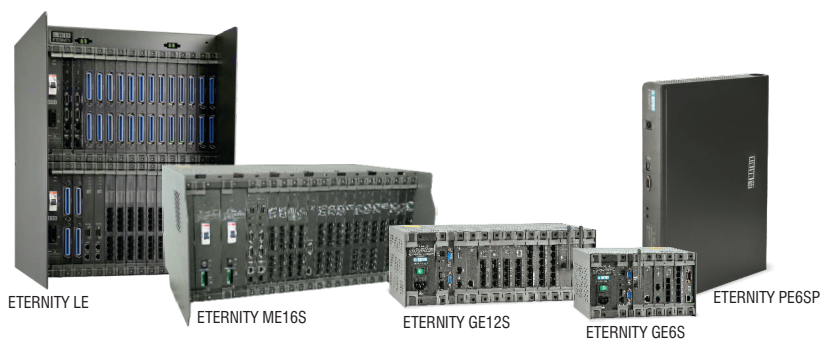|	ETERNITY PE	ETERNITY GE	ETERNITY ME	ETERNITY LE
Input	Option 1 (Mains): 100-240 VAC, 47-63Hz			–
	–	Option 2 (DC): 48VDC +/- 20%		
	–	Option 3 (with 24V DC Battery Charging Circuitary): 100-240 VAC, 47-63Hz	–	–
Power Consumption (Typical with 25% SLT Traffic)	6SP - 18W	6S - 40W	16S - 170W	450W
		12S - 70W		
LED Indications	2 LEDs for System Status	2 LEDs for System Status	4 LEDs for System Status	2 LEDs for System Status

ENVIRONMENTAL

Operating Temperature	-0°C to +45°C (32°F to113°F)
Operating Humidity	5-95% RH, Non-Condensing
Storage Temperature	-20°C to +70°C (-4°F to +158°F)
Storage Humidity	0-95% RH, Non-Condensing

MECHANICAL

Variants	Specifications	Dimension (WxHxD)	Unit Weight	Shipping Weight	Type of Shipping Material	Installation
ETERNITY PE	6SP	43.9x5.2x30.0cm 17.28"x2.04"x11.8"	2.51kg (5.52lbs)	4.1kg (9.03lbs)	Corrugated Box	Wall Mount, Table Top 19" Rack Mount
ETERNITY GE	6S	26.0x16.0x25.4cm 10.24"x6.29"x10.0"	3.22kg (7.09lbs)	4.8kg (10.58lbs)	Corrugated Box	Wall Mount Table Top
	12S	41.2x16.0x25.4cm 16.22"x6.29"x10.0"	4.72kg (10.40lbs)	6.5kg (14.33lbs)	Corrugated Box	Wall Mount, Table Top 19" Rack Mount
ETERNITY ME	16S	66.12x31.55x39.85cm 26"x12.42"x15.68"	10.5kg (23.1lbs)	15.0kg (33.0lbs)	Corrugated Box	Wall Mount Table Top
ETERNITY LE		44.85x75x47.5cm 17.65"x29.52"x18.70"	25kg (55.11lbs)	51kg (112.43lbs)	Palette (Wooden) Box	Wall Mount Table Top 19" Rack Mount

EXPANSION CARDS

ETERNITY PE	
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
CO2+DKP2+SLT4	2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 4 Single Line Telephones
CO2+SLT6	2 Two Wire Trunk (CO) Lines and 6 Single Line Telephones
CO4+SLT4	4 Two Wire Trunk (CO) Lines and 4 Single Line Telephones
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
VMS16	16 Port Voice Mail System with dedicated Mailbox for each Extension to give Voice Mail facility

ETERNITY LE   ETERNITY ME16S   ETERNITY GE12S   ETERNITY GE6S   ETERNITY PE6SP

ETERNITY GE	
ETERNITY GE6S	IP-PBX with 6 Universal Slots
ETERNITY GE12S	IP-PBX with 12 Universal Slots
Expansion Cards	**Description**
SLT20	20 Single Line Telephones
SLT16	16 Single Line Telephones
SLT8	8 Single Line Telephones
ILC20	20 Ports Intercom Line Card
DKP16	16 Digital Key Phones
DKP8	8 Digital Key Phones
DKP4+SLT16	4 Digital Key Phones and 16 Single Line Telephones
CO4+DKP2+SLT12	4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 12 Single Line Telephones
CO2+DKP2+SLT16	2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 16 Single Line Telephones
CO4+SLT16	4 Two Wire Trunk (CO) Lines and 16 Single Line Telephones
CO16	16 Two Wire Trunk Lines (CO)
CO8	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
RIC4	4 Ports Radio (HF/VHF/UHF) Interface Card
MAGNETO4	4 Magneto Phones
VMS16	16 Port Voice Mail System with dedicated Mailbox for each Extension to give Voice Mail facility

ETERNITY ME	
ETERNITY ME16S	IP-PBX with 16 Universal Slots
Expansion Cards	**Description**
SLT32	32 Single Line Telephones
SLT16	16 Single Line Telephones
ILC32	32 Ports Intercom Line Card
SLT8	8 Single Line Telephones
DKP32	32 Digital Key Phones
DKP16	16 Digital Key Phones
DKP8	8 Digital Key Phones
CO8+SLT24	8 Two Wire Trunk (CO) Lines and 24 Single Line Telephones
CO16	16 Two Wire Trunk (CO) Lines
CO8	8 Two Wire Trunk Lines (CO)
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
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
RIC8	8 Ports Radio (HF/VHF/UHF) Interface Card
RIC4	4 Ports Radio (HF/VHF/UHF) Interface Card
MAGNETO8	8 Magneto Phones
VMS16	16 Port Voice Mail System with dedicated mailbox for each extension to give Voice Mail facility
DATA4	4 Port Data Card for Data Communication over E1/PRI

ETERNITY LE	
ETERNITY LE	IP-PBX with 28 Universal Slots
Expansion Cards	**Description**
SLT48	48 Single Line Telephones
ILC48	48 Ports Intercom Line Card

User Terminals	
EON48S	Digital Key Phone; 2x24 LCD with Swivel, Backlit and Contrast Control, 17 Touch Sense and 16 Programmable Keys
EON48P	Feature Rich Digital Key Phone; 6x24 LCD with Swivel, Backlit and Contrast Control, 17 Touch Sense and 16 Programmable Keys
EON310	Executive Digital Key Phone with 2 Line LCD with Backlit and 12 DSS Keys
EON510	Premium Digital Key Phone with 240*64 Pixel Graphical LCD with Backlit and 16 DSS Keys
DSS16X4	Key Expansion Module with 64 Direct Station Selection Keys. An Attachment to EON48S and EON48P
SPARSH VP248S	Executive IP Phone with 2x24 Swivel LCD, 17 Touch Sense Keys
SPARSH VP248SE	Executive IP Phone with 2x24 Swivel LCD, 17 Touch Sense Keys and PoE
SPARSH VP330	The Touch screen IP Phone with 4.3" Large Color Display and 12 DSS Keys
SPARSH VP310	Executive IP Phone with 2 Line LCD with Backlit and 12 DSS Keys
SPARSH VP110	The Business IP Phone with 5 Line, 132 x 64 Pixel Graphical Display
SPARSH M2S	Mobile Softphone Client for Android/iOS

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
FCC	Conducted Emission: FCC Part 15 Sub Part B Radiated Emission: FCC Part 15 Sub Part B	
FCC68	US:MTXMF01BETERNITY	

TEC	IR/SW/PBX-004/02.MAR2011
EC Directives	R&TTE 1999/5/EC LVD 73/23/EEC EMC 89/336/EEC
Safety	IEC 60950:2001 First Edition
Environment Test (GE and ME)	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
Mechanical	Vibration Test : IEC 600068-2-6:2007
	Shock Test : IEC 68-2-27

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.

For further information contact:

MATRIX
TELECOM SOLUTIONS

MATRIX COMSEC

394-GIDC, Makarpura,
Vadodara-390 010, India.
Phone: +91 265 2630555
Email: Inquiry@MatrixComSec.com
SMS 'MATRIX' to +91 99987 55555
www.MatrixTeleSol.com

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