

DATASHEET - ETERNITY NX

The Next-Generation Platforms for Unified Communications

SARVAM UCS is a family of Unified Communication Solutions which runs on next-generation hardware platfrom. ETERNITY NX includes members suitable for SME and ENTERPRISE segments. ETERNITY LENX is the biggest in the family and is targeted at Large Enterprises. ETERNITY MENX is targeted at Medium Enterprises. ETERNITY GENX is the smallest in the family and is targeted at SMEs.



BUILT-IN RESOURCES					
SYSTEM RESOURCES	DESCRIPTION	ETERNITY GENX	ETERNITY GENX	ETERNITY MENX#	ETERNITY LENX#
Compatible Software Server	Unified Communication Server	SARVAM UCS SME	SARVAM UMG	SARVAM UCS ENT	SARVAM UCS ENT
RS232C (COM) Ports	SMDR/PMS/CAS Interfaces	1	1	-	-
USB Ports	InternI USB 2.0 External USB 3.0	2	2	2	2
USB Storage	Intenal USB - Up to 64GB (8GB - for Software Firmware and 260 Hours of Recording (Factory Fitted), 64GB Pen Drive can be used for 2170 Hours of Recording) External USB - for future use	8GB	8GB	8GB	8GB
Group Conference (3-Party)	Numbers of 3-Party Conferences	15	-	15	15
Maximum participants in Single Conference	Maximum Participants in Single Conference	21	-	21	21
Voice Messages (16 seconds each)	Auto-Attendant, Voice Help, Voice Tones	15	-	15	15
Ethernet Ports (Gigabit)	Web-based Configuration, PMS, SMDR, System Log, VOIP (LAN and WAN) and VMS	2	2	2	2

SYSTEM SCALABILITY					
SYSTEM RESOURCES	DESCRIPTION	SARVAM UCS SME (ETERNITY GENX)	SARVAM UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX)#	SARVAM UCS ENT (ETERNITY LENX)#
Universal Slots	For Interface Expansion Cards (except VOIP and VMS)	12	12	16	27
SLT/FXS Ports	Single Line Analog Telephones	240	120	512	1296
DKP/DSS Ports	Proprietary Digital Key Phones or DSS Consoles	96	-	128	128
CO/FXO (TWT) Ports	Two Wire Trunk (CO) Lines	64	120	128	128
BRI Ports	ISDN BRI Network or ISDN Compatible Devices	32	48	32	32
T1/E1/PRI Ports	T1 or E1 or ISDN PRI Network or Compatible Device	8	8	8	24
GSM/3G Ports	GSM/3G Network	40	48	64	64

SYSTEM RESOURCES	DESCRIPTION	SARVAM UCS SME (ETERNITY GENX)	SARVAM UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX)*	SARVAM UCS ENT (ETERNITY LENX)*
UC (SIP/IP) Users	Registration of Hard SIP/IP Phones, UC Client for Android/iOS and Windows PC using Business Application	999	-	2000	2000
SIP Trunks	SIP Trunks (Clients) for ITSP or Peer-to-Peer	99	120	99	99
VOIP Channels	VOIP Channels for simultaneous calling with transcoding	128	128	256	256
NX DBM VOCODER64	DAUGTHER-BOARD MODULE on CPU for VOCODER (VOIP) Channels	2	2	4	4
NX DBM VMS64	DAUGTHER-BOARD MODULE on CPU for simultaneous Voice Mail sessions	1	-	1	1
Voice Mail Channels (Sessions)	Voice Mail System with Auto-Attendant and with dedicated Mailbox for each type of extension (Analog, Digital, IP)	64	-	64	64
Radio Interface Ports	Interface to HF/VHF/UHF Radio Trasnceiver	16	-	16	16
E&M Ports	E&M Network	32	-	32	32

NX DBM VOCODER AND NX DBM VMS - SYSTEM RESOURCES					
SYSTEM RESOURCES	DESCRIPTION	SARVAM UCS SME (ETERNITY GENX)	SARVAM UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX)#	SARVAM UCS ENT (ETERNITY LENX)*
Max. Concurrent calls from IP User to other IP User	IP-IP Audio Calls without Transcoding	500	-	500	500
Max. Concurrent calls from IP User to other IP User	IP-IP Audio Calls with Transcoding	64	-	128**	128**
Max concurrent IP-TDM calls	IP-TDM Audio Calls	128	128	256**	256**
Concurrent Video Calls from IP User to other IP User	VOCODER Channel will not be Occupied (Does not Support Transcoded Video Calls)	55	-	55**	55**
Concurrent Voice Module (Play Voice Messages)	Concurrent calls management with Auto-attendant	9	-	9	9
Features need transcoding channel (NX DBM - VOCODER Channels)	Conference - for each IP call, Conversation Recording/Call Tapping - for each IP Call, Retrieval of Voice Mail - from each IP user, Trunk auto-answer/VMS Auto-attendant – for each incoming call on SIP Trunk, for each IP to non-IP call				

^{**}The values are indicative and may change without prior notice on product release

For redundancy, the equivalent software license (apart from primary CPU) is to be procured additionally.

[#] ETERNITY LENX Launching in February-2017 (without redundancy support). The redundancy support shall be released by April-2017.

[#] ETERNITY MENX Launching in April-2017.

SARVAM UCS - CALL MANAGEMENT FEATURES

- Abbreviated Dialing (Global and Personal)
- · Access Codes (Programmable)
- Account Codes (Forced)
- Alarm-multiple
- · Alarms (Time, Daily, Future Date and Time. Remote)
- · Alarm-snooze
- · Allowed and Denied Lists
- Alternate Number Dialing
- Anonymous Call Rejection (SIP)
- · Auto Call Back (Busy, No Reply)
- Auto Configuration for SIP Phones and UC Clients
- Auto Redial
- · Auto-attendant (9 Concurrent Calls)
- Background Music (DKP and SLT)
- Backup SMDR
- · Backup System Configuration
- Backup System Software
- Barge-in
- BLF
- Boss Ring
- Bulk SMS
- Call Budget on Extensions
- Call Budget on Trunks
- 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 and 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)
- Conference Multiple Participants
- Conference Dial-in
- Conflict Dialing
- Continued Dialing
- · Conversation Recording
- Date and Time Format
- . Daylight Saving Time (DST)
- · Day Night Mode
- Department Call
- Digest Authentication (on SIP)
- Direct Dialing-in (DDI on T1/E1/PRI)
- Direct Inward Dialing (DID)
- Direct Inward System Access (DISA)
- Direct Station Selection Console (DSS Console)

- Distinctive Rings
- Do-Not-Disturb (DND)
- Do-Not-Disturb (Remote)
- Dual Ring
- Dynamic DNS (DDNS)
- Dynamic Lock (Manual)
- Email Notification (VMS)
- Email to SMS and Vice Versa
- Embedded Registrar and Proxy Servers (SIP Server)
- Emergency Calls Detection and Reporting
- Emergency Conference
- Emergency Number Dialing
- ETERNITY-COSEC Integration
- External Call
- External Call Forward (ECF)
- 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
- IM (Chat)
- IM to SMS and Vice Versa
- Installation Wizard
- Internal Call
- Internal Call Restriction
- Interrupt Request
- IPv6 Ready
- 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 Super Vision
- Logical Partitioning Maturity (Polarity Reversal, Delay, CPD)
- Meet Me Paging
- . Menu based Command (DKP)
- Message Wait Indication (LED. Shuttered Dial tone, Voice Message)
- Missed Call Log
- Mobile Port (GSM/3G Port)
- Multi-stage Dialing
- Music-On-Hold
- Mute
- Name Programming (Station, Trunk)
- NAT and STUN (VoIP)
- Network Selection (GSM)
- Off-hook Alert (DKP)
- Online SMDR
- · Operator (Single, Multiple)

- Override
- Paging (Internal)
- Peer-to-Peer Calling
- Presence Sharing
- Priority (Intercom and Trunk)
- Privacy
- Programming the System (Using SLT, DKP, Ethernet Port)
- Property Management System (PMS)
- Interface
- 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
- Secure RTP
- Selective Trunk Access
- Self Ring Test
- Shared Call Apearance
- SIP and RTP QoS (VOIP)
- · SIP over TCP and TLSS
- · SMDR Posting
- (Call Accounting System Interface)
- · SMS on No Reply
- Software Upgrade
- Station Groups
- Station Message Detail Record (Incoming, Outgoing and Internal - 12000 Records)
- Station Name
- System Activity Log and Display
- · System Administrator (SA) Mode
- System Engineer (SE) Mode
- · System Fault Log
- · System Security (Password/Auto blacklist/Whitelist/Trusted IP Addresses/ Interface Access Restrictions)
- · Time Tables
- Time Zone Display
- Toll Control
- Trunk Access Group
- Trunk Auto Answer • Trunk Connectivity (BRI)
- Trunk Connectivity (GSM/3G)
- Trunk Connectivity (T1/E1/PRI)
- Trunk Connectivity (TWT or CO)
- Trunk Connectivity (VOIP SIP based)
- Trunk Reservation
- User Absent/Present
- · Video Calling
- · Virtual Stations
- · Voicemail Voice Prompts for Tones
- Walk-in Class of Service (Single/Multiple calls)
- · Web based Programming

Note: For UMG feature list, refer SARVAM UMG brochure.

LICENSES

APPLICATIONS	ETERNITY GENX	ETERNITY MENX#	ETERNITY LENX#
	SARVAM UCS SME SARVAM UCS ENT		UCS ENT
EXPANSION	SARVAM EXP4 SME SARVAM EXP4 ENT		
ID QUANNE	SARVAM VOCODER CHNL4	ODER CHNL4	
IP CHANNEL	SARVAM VOCODER CHNL16		
VAAO OHANNEI	SARVAM VMS CHNL4		
VMS CHANNEL	SARVAM VMS CHNL16		
HOSPITALITY	SARVAM HOSPITALITY SME	SARVAM HOS	PITALITY ENT
PMS	SARVAM PMS SME	SARVAM	PMS ENT
SMS GATEWAY	SARVAM SMS GATEWAY SME	SARVAM SMS	GATEWAY ENT
SMS SERVER	SARVAM SMS SERVER SME	SARVAM SMS	SERVER ENT
GATEWAY	SARVAM GATEWAY SME	SARVAM GA	ATEWAY ENT
QSIG	SARVAM QSIG SME	SARVAM	QSIG ENT
СТІ	SARVAM CTI SME	SARVAM	CTI ENT
	SARVAM IPSUB5	,	
	SARVAM IPSUB10		
IP SUBSCRIBER	SARVAM IPSUB50		
	SARVAM IPSUB100		
	SARVAM IPSUB500		
	SARVAM VARTA USER5E		
	SARVAM VARTA USER10E		
	SARVAM VARTA USER50E		
	SARVAM VARTA USER100E		
	SARVAM VARTA USER500E		
	SARVAM VARTA USER5P		
	SARVAM VARTA USER10P		
UC CLIENT	SARVAM VARTA USER50P		
	SARVAM VARTA USER100P		
	SARVAM VARTA USER500P		
	SARVAM VARTA USER5C		
	SARVAM VARTA USER10C		
	SARVAM VARTA USER50C		
	SARVAM VARTA USER100C		
	SARVAM VARTA USER500C		

TECHNICAL SPECIFICATIONS

TECHNOLOGY	
Type of Switching	IP at Core
Processor Speed	900 MHz Dual Core
Slots Type	Universal

VOIP	
Туре	DAUGTHER-BOARD MODULE on CPU
VOCODER Channels per DBM (DAUGHTER-BOARD MODULE)	64
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 99 SIP Accounts per System, Out Bound Proxy Support, Display Name, User Name, Password, URL, Proxy URL, Register Interval
VOIP Channels	128/248 VOIP Channels with 2/4 VOIP Daughter-Board Modules
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, Password Protected Configuration by Admin and User
Physical Connector	Ethernet (RJ45) Gigabit Port, Auto MDIX (10/100/1000 base-T)

VOICEMAIL			
Туре	DAUGTHER-BOARD MODULE on CPU		
VMS Channels per DBM (DAUGHTER-BOARD MODULE)	64		
Voicemail Box	Dedicated Mail Box for each type of Extension (Analog, Digital, IP)		
Voice Messages	15 Voice Messages of 16 second each		
Voice Recording	Recording up to 2,170 hours with 64 GB USB Pen Drive		

GSM	
Туре	Expansion Card for GSM Interface
GSM Band (MHZ)	Quad-Band: GSM850,EGSM900, DCS1800, PCS1900
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
Hallstillssion Powel	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

* Depends on GSM Frequency Band

3G	
Туре	Expansion Card for GSM 3G Interface
GSM Band (MHZ)	Quad-Band: GSM850, EGSM900, DCS1800, PCS1900 Penta-Band: GSM: 850/900/1800/1900 and UMTS: 800/850/900/1900/2100
Compliant	ETSI GSM Phase 2/2+
SIM Card	One SIM per GSM Port
SIM Interface	1.8V, 3V
Transmission Power	Output Power
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

* Depends on GSM/3G Frequency Band

ISDN BRI	
Туре	Expansion Card for ISDN BRI Interface
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	
Туре	Expansion Card for ISDN PRI Interface
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)/Mono-mode Fiber Optic*

*Option	available	with	ETERNITY	E1F0	PRI	SINGLE

E1 CAS	
Туре	Expansion Card for T1 E1 ISDN PRI
Bit Rate	2048 kbps +/- 50ppm
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)/Mono-mode Fiber Optic

T1 RBS	
Туре	Expansion Card for T1 E1 ISDN PRI
Bit Rate	1544 kbps +/- 50ppm
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)

CO (TWT - Two Wire Trunk)				
Туре	Expansion Card for CO/FXO Interface			
Signaling	Loop Start			
Loop Limit	1200Ω			
Off Hook AC Impedance	600/900/Complex			
Pulse Dialing	10/20PPS			
DTMF Dialing and Reception	ITU-T Q.23 & Q.24			
Return Loss	>18dB			
Longitudinal Balance	>50dB			
Transmission Level Adjust	Tx Gain: -15dB to +10 dB, 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			

COMBAT NET RADIO (RADIO INTERFACE CARD)				
Туре	Expansion Card for Radio Interface			
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	Centronix			

E&M	
Туре	Expansion Card for E&M Interface
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	$20~\text{dB}$ against Configurable Balance of 600Ω or AT&T Complex Impedance
Transmit Gain	+/- 1 dB
Receive Gain	+/- 1 dB
Physical Connector	RJ45

DKP (DIGITAL STATION)				
Туре	Expansion Card for Digital Key Phone Ports			
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			

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			

SLT (ANALOG STATION)				
Туре	Expansion Card for Analog Extensions			
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

POWER SUPPLY				
Product	SARVAM UCS SME (ETERNITY GENX)	SARVAM UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX)#	SARVAM UCS ENT (ETERNITY LENX)*
Inputs	Option 1 (Mains): 100-240 VAC, 47-60Hz (250W)		Option 1 (Mains): 100-240 VAC, 47-60Hz (500W)	48VDC +20% to -15% (1400W)
шрисѕ	Option 2 (DC): 48VDC +20% to -15% (250W)		Option 2 (DC): 48VDC +20% to -15% (500W)	
Power Consumption (Typical with 30% (72) SLT Off-hook)	170 Watt		-	-
LED Indications	4 LEDs for Power Supply Health Status		4 LEDs for Power Supply Health Status	

MECHANICAL					
Specifications	SARVAM UCS SME / UMG (ETERNITY GENX)	SARVAM UCS ENT (ETERNITY MENX)*	SARVAM UCS ENT (ETERNITY LENX)#		
Dimensions (WxHxD)	43.65x22.6x17.35cm 17.18"x8.9"x6.83"	61.2x31.55x40.5cm 24"x12.42"x15.94"	49.6x71.5x48.2cm 19"x28.14"x18.97"		
Unit Weight	5kg (11.02lbs)	-	-		
Shipping Weight	8kg (17.63lbs)	-	-		
Type of Shipping Material	Corrugated Box	Corrugated Box	Corrugated Box		
Installation	19" Rack Mount with 4U Enclosure Wall Mount Table Top	7U Enclosure Wall Mount Table Top	19" Rack Mount with 16U Enclosure Wall Mount Table Top		

COMPLIANCES			
	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	
EMI/EMC	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	
FUU	Radiated Emission	FCC Part 15 Sub Part B	
	R&TTE 1999/5/EC		
EC Directives	LVD 2014/35/EU		
	EMC 2014/30/EU		
Safety	EN 60950-1:2006 + AM1:2010 + AM12:2011 + AM2:2013		
	Cold Test	IS:9000 Part 2/Section 4	
Environment Test	Dry Heat Test	IS:9000 Part 3/Section 5	
	Damp Test	IS:9000 Part 5/Section 1	

ETERNITY LENX redundancy support by August-2017 and ETERNITY MENX in July-2017

ORDERING INFORMATION

SARVAM – UNIFIED COMMUNICATION SERVER		
SARVAM UCS ENT	Matrix SARVAM Unified Communication Server for ENT for ETERNITY LENX-MENX*(hardware). Preloaded with licenses for 5 IPSUB, 4 VOCODER CHANNELS and 4 VOICE MAIL CHANNELS. For VOCODER and VOICE MAIL, respective daughter-boards are required.	
SARVAM UCS SME	Matrix SARVAM Unified Communication Server for SME for ETERNITY GENX (hardware). Preloaded with licenses for 5 IPSUB, 4 VOCODER CHANNELS and 4 VOICE MAIL CHANNELS. For VOCODER and VOICE MAIL, respective daughter-boards are required.	
SARVAM UMG SME	SARVAM UMG is a Universal Media Gateway software that comes in the form of license. SARVAM UMG SME is designed to work with ETERNITY GENX to avail Media Gateway functionality.	
SARVAM VOCODER CHNL4 SARVAM VOCODER CHNL16	VOCODER CHANNELS for SARVAM UCS to support 4/16 simultaneous calls with transcoding.	
SARVAM VMS CHNL4 SARVAM VMS CHNL16	License for VOICE MAIL CHANNELS for SARVAM UCS to support 4/16 simultaneous voice mail sessions.	
SARVAM EXP4 ENT	License for activating 4 expansion slots on SARVAM UCS ENT (ETERNITY MENX and ETERNITY LENX). Similar to all other licenses, this license is also installed on the CPU card. Therefore, when the original CPU card is changed, the expansion slots license will also go with the same.	
SARVAM EXP4 SME	License for activating 4 expansion slots on SARVAM UCS SME (ETERNITY GENX). Similar to all other licenses, this license is also installed on the CPU card. Therefore, when the original CPU card is changed, the expansion slots license will also go with the same.	
SARVAM IPSUB5 SARVAM IPSUB10 SARVAM IPSUB50 SARVAM IPSUB100 SARVAM IPSUB500	License of IP Subscribers for SARVAM UCS to create 5/10/50/100/500 VOIP subscribers. Common for all types of SMB, SME and ENT UCS SERVERS.	
SARVAM VARTA USER5E SARVAM VARTA USER10E SARVAM VARTA USER50E SARVAM VARTA USER100E SARVAM VARTA USER500E	License for 5/10/50/100/500 VARTA UCS SOFT CLIENTS with ESSENTIAL features. SARVAM UCS needs this license to register ANDROID/IOS/WINDOWS DESKTOP UCS CLIENTS. This licensee is not required for HARDWARE IP-PHONES. Common for all types of SMB, SME and ENT UCS SERVERS.	
SARVAM VARTA USER5P SARVAM VARTA USER10P SARVAM VARTA USER50P SARVAM VARTA USER100P SARVAM VARTA USER500P	License for 5/10/50/100/500 VARTA UCS SOFT CLIENTS with PROFESSIONAL features. SARVAM UCS needs this license to register ANDROID/iOS/WINDOWS DESKTOP UCS CLIENTS. This licensee is not required for HARDWARE IP-PHONES. Common for all types of SMB, SME and ENT UCS SERVERS.	

SARVAM VARTA USER5C SARVAM VARTA USER10C SARVAM VARTA USER100C SARVAM VARTA USER500C	License for 5/10/50/500 VARTA UCS SOFT CLIENTS with Premium Collaboration features. SARVAM UCS needs this license to use the collaborative features of VARTA like VARTA - Outlook integration, Calendar Integration, Click to Call and more. Common for all types of SMB, SME and ENT UCS SERVERS.
SARVAM SMS GATEWAY SME/ENT	License to enable SMS GATEWAY functionality for SARVAM UCS SME/ENT to connect to third party SMS GATEWAY CLIENT (SMPP V3.4) to send/receive SMS over GSM SIM installed on GSM Interface card.
SARVAM SMS SERVER SME/ENT	License to enable SMS SERVER functionality for SARVAM UCS SME/ENT to connect to any EMAIL client (i.e. Outlook, Gmail, Yahoo). Used to send/receive EMAIL to SMS and vice-versa over GSM SIM installed on GSM Interface card.
SARVAM HOSPITALITY SME/ENT	License to enable HOSPITALITY functions suite for SARVAM UCS SME/ENT to support HOSPITALITY functions and features used in Hotel-Motel.
SARVAM PMS SME/ENT	License to enable PROPERTY MANAGEMENT SYSTEM interface for SARVAM UCS SME/ENT to integrate with third party PROPERTY MANAGEMENT SYSTEM (PMS) used in Hotel-Motel.
SARVAM GATEWAY SME/ENT	License for SARVAM UCS SME/ENT to support GATEWAY functions in addition to UCS functions. This license allows using SARVAM as UCS and GATEWAY simultaneously. This is different from dedicated UMG GATEWAY APPLICATION.
SARVAM QSIG SME/ENT	License for QSIG interface for SARVAM UCS SME/ENT to connect with other MATRIX OR THIRD PARTY PBX using ISDN PRI for seamless calling and interworking of certain PBX features.
SARVAM CTI SME/ENT	License to enable TAPI 2.2 for SARVAM UCS SME/ENT to Connect to THIRD PARTY CTI APPLICATION
NX DBM VOCODER64	VOCODER DAUGHTER-BOARD MODULE (hardware) for ETERNITY GENX/MENX/LENX CPU CARDS capable to support maximum 64 simultaneous VOCODING CHANNELS. UCS AND UMG SERVER licenses are supplied with 4 built-in VOCODER CHANNELS. Additional VOCODER CHNL license is required to activate desired number of channels.
NX DBM VMS64	VOICE MAIL DAUGHTER-BOARD MODULE (hardware) having capability to support maximum 64 simultaneous VOICE MAIL sessions for ETERNITY GENX/MENX/LENX CPU CARD. UCS AND UMG SERVER licenses are supplied with 4 built-in VMS CHANNELS. Additional VMS CHNL license is required to activate desired number of channels.
ETERNITY GENX12SAC	ETERNITY GE NEXT-GENERATION PLATFORM with CPU CARD, 12 UNIVERSAL SLOTS and AC power supply in 19" 4U ENCLOSURE. VOCODER and VOICE MAIL HARDWARE DAUGHTER-BOARD MODULES are NOT INCLUDED.
ETERNITY GENX12SDC	ETERNITY GE NEXT-GENERATION PLATFORM with CPU CARD, 12 UNIVERSAL SLOTS and DC power supply in 19" 4U ENCLOSURE. VOCODER and VOICE MAIL HARDWARE DAUGHTER-BOARD MODULES are NOT INCLUDED.

ETERNITY MENX16SAC ETERNI		
ETERNITY MENX16SDC and D.D. power supply. VOCODER and VOICE Malt. HARDWARE DAUGHTER-BOARD MODULES are NOT INCLUDED. ETERNITY LENX27SDC ETERNITY LENX27SDC ETERNITY LENX27SDC ETERNITY LENX27SDC ETERNITY LENX27SDC ETERNITY BY CARD SLI120 ETERNITY GE CARD SLI120 ETERNITY GE CARD SLI120 ETERNITY GE CARD SLI16 ETERNITY GE CARD SLI16 ETERNITY GE CARD DATI6 ETERNITY GE CARD CO4+ DKP2+SLI12 ETERNITY GE CARD CO4+ DKP2+SLI16 ETERNITY GE CARD CO4+ DKP2+SLI16 ETERNITY GE CARD CO4+ SLI16 ETERNITY GE CARD CO16 ETERNITY GE CARD BRI4 TI/E1 PRI Line or Compatible Devices ETERNITY GE CARD SLI4 TI/E1 PRI Line or Compatible Device with OSIG Support ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD ASIA4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD	ETERNITY MENX16SAC	and AC power supply in 7U ENCLOSURE. VOCODER and VOICE MAIL HARDWARE
ETERNITY GE CARD SLI26 ETERNITY GE CARD DKP16 ETERNITY GE CARD DKP26 ETERNITY GE CARD DKP8 ETERNITY GE CARD DKP8 ETERNITY GE CARD DKP8 ETERNITY GE CARD CO4+ DKP2+SLI12 ETERNITY GE CARD CO4+ DKP2+SLI26 ETERNITY GE CARD BRI4 ETERNITY GE CARD GSM4 TO Connect to Radio Network Connectivity ETERNITY GE CARD DKAM4 ETERNITY GE CARD DATA4 DATA CARD	ETERNITY MENX16SDC	and DC power supply. VOCODER and VOICE MAIL HARDWARE
ETERNITY GE CARD SL116 ETERNITY GE CARD DKP16 ETERNITY GE CARD DKP6 ETERNITY GE CARD DKP6 ETERNITY GE CARD DKP6 ETERNITY GE CARD DKP6 ETERNITY GE CARD CO4+ DKP4+SL116 ETERNITY GE CARD CO4+ DKP2+SL112 ETERNITY GE CARD CO4+ DKP2+SL112 ETERNITY GE CARD CO2+ DKP2+SL112 ETERNITY GE CARD CO2+ DKP2+SL116 ETERNITY GE CARD CO2+ DKP2+SL116 ETERNITY GE CARD CO2+ DKP2+SL16 ETERNITY GE CARD CO2+ DKP2+SL16 ETERNITY GE CARD CO2+ SL116 ETERNITY GE CARD CO2+ SL116 ETERNITY GE CARD CO3+ SL116 ETERNITY GE CARD E3+ SL116 ETERNITY GE CARD E3+ SL116 ETERNITY GE CARD CO3+ SL116 ETERNITY GE CARD CO3	ETERNITY LENX27SDC	and DC power supply in 19" 16U enclosure. VOCODER and VOICE MAIL HARDWARE
ETERNITY GE CARD DKP8 ETERNITY GE CARD DKP4+SLT16 ETERNITY GE CARD CO4+ DKP2+SLT12 4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 12 Single Line Telephones with built-in 2-port PFT ETERNITY GE CARD CO4+ DKP2+SLT18 ETERNITY GE CARD CO2+ DKP2+SLT8 ETERNITY GE CARD CO2+ DKP2+SLT16 ETERNITY GE CARD CO3+ SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO8 ETERNITY GE CARD CO8 ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD E8M4 To Connect to Radio Network ETERNITY GE CARD E8M4 To Connect to E8M Network ETERNITY GE CARD DATA4 DATA CARD	ETERNITY GE CARD SLT16	20/16/8 Single Line Telephones
ETERNITY GE CARD CO4+ DKP2+SLT12 ETERNITY GE CARD CO4+ DKP2+SLT12 ETERNITY GE CARD CO4+ DKP2+SLT8 4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 12 Single Line Telephones with built-in 2-port PFT ETERNITY GE CARD CO2+ DKP2+SLT16 2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 8 Single Line Telephones with built-in 2-port PFT ETERNITY GE CARD CO2+ DKP2+SLT16 2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 16 Single Line Telephones ETERNITY GE CARD CO4+ SLT16 4 Two Wire Trunk (CO) Lines and 16 Single Line Telephones 16/8 Two Wire Trunk Lines (CO) ETERNITY GE CARD CO16 ETERNITY GE CARD BRI4 ETERNITY GE CARD BRI4 ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E8M4 DATA CARD DATA CARD		16/8 Digital Key Phones
ETERNITY GE CARD CO4+ DKP2+SLT18 ETERNITY GE CARD CO2+ DKP2+SLT16 ETERNITY GE CARD CO2+ DKP2+SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO8 ETERNITY GE CARD CO8 ETERNITY GE CARD CO16 ETERNITY GE CARD CO8 ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network To Connect to Radio Network ETERNITY GE CARD DATA4 DATA CARD		4 Digital Key Phones and 16 Single Line Telephones
ETERNITY GE CARD CO2+ DKP2+SLT16 ETERNITY GE CARD CO2+ DKP2+SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO16 ETERNITY GE CARD BRI4 ETERNITY GE CARD BRI4 ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) TO Connect to Radio Network ETERNITY GE CARD DATA4 DATA CARD DATA CARD		4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 12 Single Line Telephones with built-in 2-port PFT
DKP2+SLT16 ETERNITY GE CARD CO4+ SLT16 ETERNITY GE CARD CO16 ETERNITY GE CARD CO8 ETERNITY GE CARD RI4 ETERNITY GE CARD BRI4 A Two Wire Trunk (CO) Lines and 16 Single Line Telephones 16/8 Two Wire Trunk Lines (CO) ETERNITY GE CARD BRI4 A ISDN BRI Lines or ISDN Compatible Devices ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic ETERNITY GE CARD GSM4 A GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD		4 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 8 Single Line Telephones with built-in 2-port PFT
ETERNITY GE CARD C016 ETERNITY GE CARD RI14 ETERNITY GE CARD BRI4 A ISDN BRI Lines or ISDN Compatible Devices ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 A GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD		2 Two Wire Trunk (CO) Lines, 2 Digital Key Phones and 16 Single Line Telephones
ETERNITY GE CARD CO8 ETERNITY GE CARD BRI4 4 ISDN BRI Lines or ISDN Compatible Devices ETERNITY GE CARD T1E1PRI SINGLE ETERNITY GE CARD E1FO PRI SINGLE ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E8M4 To Connect to E8M Network ETERNITY GE CARD DATA4 DATA CARD		4 Two Wire Trunk (CO) Lines and 16 Single Line Telephones
ETERNITY GE CARD T1E1PRI T1/E1 PRI Line or Compatible Device with QSIG Support ETERNITY GE CARD E1FO PRI SINGLE E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD		16/8 Two Wire Trunk Lines (CO)
SINGLE ETERNITY GE CARD E1FO PRI SINGLE E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD	ETERNITY GE CARD BRI4	4 ISDN BRI Lines or ISDN Compatible Devices
PRI SINGLE ET PRI Line of Compatible Device with QSIG Support over Fiber Optic ETERNITY GE CARD GSM4 4 GSM SIMs for GSM Network Connectivity ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD		T1/E1 PRI Line or Compatible Device with QSIG Support
ETERNITY GE CARD RIC4 To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver) ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD		E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic
ETERNITY GE CARD E&M4 To Connect to E&M Network ETERNITY GE CARD DATA4 DATA CARD	ETERNITY GE CARD GSM4	4 GSM SIMs for GSM Network Connectivity
ETERNITY GE CARD DATA4 DATA CARD	ETERNITY GE CARD RIC4	To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver)
	ETERNITY GE CARD E&M4	To Connect to E&M Network
ETERNITY GE CARD MAGNETO 4 MAGNETO CARD	ETERNITY GE CARD DATA4	DATA CARD
	ETERNITY GE CARD MAGNETO4	MAGNETO CARD
ETERNITY GE CARD ILC20 Intercom Line Card for Analog Extension (SLT)	ETERNITY GE CARD ILC20	Intercom Line Card for Analog Extension (SLT)

ETERNITY LE CARD SLT48	48 Single Line Telephones
ETERNITY ME CARD SLT32 ETERNITY ME CARD SLT16 ETERNITY ME CARD SLT8	32/16/8 Single Line Telephones
ETERNITY ME CARD DKP32 ETERNITY ME CARD DKP16 ETERNITY ME CARD DKP8	32/16/8 Digital Key Phones
ETERNITY ME CARD CO8+SLT24	8 Two Wire Trunk (CO) Lines and 24 Single Line Telephones
ETERNITY ME CARD CO16 ETERNITY ME CARD CO8	16/8 Two Wire Trunk Lines (CO)
ETERNITY ME CARD BRI4	4 ISDN BRI Lines or ISDN Compatible Devices
ETERNITY ME CARD T1E1PRI DUAL	T1/E1 PRI Line or Compatible Device with QSIG Support
ETERNITY ME CARD T1E1PRI SINGLE	T1/E1 PRI Line or Compatible Device with QSIG Support
ETERNITY ME CARD E1FO PRI DUAL	E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic
ETERNITY ME CARD E1FO PRI SINGLE	E1 PRI Line or Compatible Device with QSIG Support over Fiber Optic
ETERNITY ME CARD GSM8	8 GSM SIMs for GSM Network Connectivity
ETERNITY ME CARD RIC8	To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver)
ETERNITY ME CARD RIC4	To Connect to Radio Network (To have an Interface with HF/VHF/UHF Radio Trasnceiver)
ETERNITY ME CARD E&M8	To Connect to E&M Network
ETERNITY ME CARD E&M4	To Connect to E&M Network
ETERNITY ME CARD ILC32	Intercom Line Card for Analog Extension (SLT)
ETERNITY ME CARD DATA4	DATA CARD
ETERNITY ME CARD MAGNET08	MAGNETO CARD

Note: ETERNITY LE/ME/GE Interface cards (except VOIP and VMS) are compatible with SARVAM UCS. ETERNITY LE/ME/GE SLT, CO, CO+SLT, GSM, T1E1PRI and BRI are compatible with SARVAM UMG.

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; Matrix is committed to keep pace with the revolutions in the telecom and security industries. With more than 40% of its human resources dedicated to the development of new products, Matrix has launched cutting-edge products like Video Surveillance solutions, Access Control, Time-Attendance, IP-PBX, Universal Gateways, Terminals, Convergence solution, VoIP Gateways and GSM Gateways. 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 customers representing the entire spectrum of industries. Matrix has won many international awards for its innovative products.

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