



System Capacity

Maximum Trunks

The PBX supports the following number of trunks.

Type	Standalone/Slave Unit				One-look Networking ¹
	KX-NS500	With 1 KX-NS520	With 2 KX-NS520	With 3 KX-NS520	
Total Number of Trunks	100	136	172	208	600
Legacy	36	72	108	144	600
BRI	8	24	40	56	600
PRI23	23	46	69	92	600
PRI30	30	60	90	120	600
E1	30	60	90	120	600
Analogue	12	24	36	48	600
IP	64	64	64	64	256
H.323	32	32	32	32	128
SIP	64	64	64	64	256

Option List

Hardware

Component	Model No.	Installed in
DSP	S (63 resources)	DSP Card Slot
	M (127 resources)	
	L (254 resources)	
Storage Memory ¹	XS (VM Recording Time: 40 hours)	Storage Memory Card Slot
	S (VM Recording Time: 200 hours)	
	M (VM Recording Time: 400 hours)	
Trunk	LCOT6	Trunk/Doorphone Slot
	BRI2	
	BRI4	
	PRI23	
	PRI30/E1	
	DPH2	
Extension	DHLC4	Extension Slot
	DLC8	
	DLC16	
	MCCLC8	
	MCCLC16	
Expansion Master Card	EXP-M	EXP-M Slot
Remote Modem	RMT	RMT Slot

Activation Keys

Component	Model No.	Maximum	
Networking	OSIG Network	1 activation key	
	One-look Networking	16 activation key	
System Function	Call Centre Feature ² ; Announcement of waiting number for queuing	1 activation key	
IP Trunk	IP Trunks (H.323/SIP)	SIP 64 ch H.323 32 ch	
	2 ch		
	4 ch		
	8 ch		
IP Telephone ³ - User Licence	IP PTs/ KX-UT Series/ IP Softphones	128 ch	
			1 ch
			5 ch
			10 ch
			20 ch
	SIP Phones	128 ch	
			Up to 4 ch
			1 ch
			5 ch
			10 ch
Cellular Phone Extension - User Licence	Mobile Extension	416 cellular phone extensions	
			1 ch
			5 ch
			10 ch
IP-CS Channel Expansion	Channel Expansion (from 4 to 8 ch)	32 activation key	
			1 CS
			5 CS
			10 CS
Unified Messaging System	Feature		
	Two-way REC (Recording) Control	1 activation key	
	Message Backup	1 activation key	
	Unified Messaging Channel	2 ch	24 UM Ports
		2 ch	
		4 ch	
	User (Mailbox) Licence		
	E-mail (IMAP4) Client/ E-mail Notification	1 user	500 mailboxes
		5 users	
		10 users	
		20 users	
		All users	
	Two-way Recording/ Two-way Transfer	1 user	416 users
		5 users	
		10 users	
20 users			
All users			

¹ Storage Memory for VM Time, ACD Report, SMDR expansion.

² An SD card is necessary to use ACD Reports.

³ IP Pts: KX-NT500/300 series IP proprietary phones, KX-NT265 IP Softphones: KX-NCS8100, KX-TDA0350

SIP Phones: KX-NT700 IP Conferencing phone and Third party SIP phones (SIP hardphones/SIP softphones).

⁴ The same number as the maximum number of allowable extensions.

⁵ Annual Maintenance Licence.

Maximum Terminal Equipment

The following shows the number of each terminal equipment type supported by the PBX.

Type	Standalone/Slave Unit				One-look Networking ¹
	KX-NS500	With 1 KX-NS520	With 2 KX-NS520	With 3 KX-NS520	
Extensions (DXDP²)	162 (168)	194 (208)	226 (248)	258 (288)	1000
Legacy (DXDP ²)	34 (40)	66 (80)	98 (120)	130 (160)	1000
SLT (DXDP ²)	32	64	96	128	512 (1000)
DPT (T76xx/DT3xx)(DXDP ²)	18 (24)	34 (48)	50 (72)	66 (96)	512 (1000)
DPT (T74xx/T75xx)	8	16	24	32	512
APT	8	16	24	32	336
IP	128	128	128	128	1000
IP-PT	128	128	128	128	1000
SIP	128	128	128	128	1000
DSS Console	8	8	8	8	64
CS	36	40	44	48	128
DPT-CS (2 ch)	4	8	12	16	128
DPT-CS (8 ch)	2	4	6	8	64
IP-CS	32	32	32	32	128
SIP-CS	16	16	16	16	128
PS	128	128	128	128	512
Doorphone	2	4	6	8	64
Door Opener	2	4	6	8	64
External Sensor	2	4	6	8	64

¹ The NS1000 must be used as the master unit.

² When Digital XDP is used.

Component	Model No.	Maximum	
User Licence			
CA Basic-Express	All users	Preinstalled	
CA PRO	1 user	without CA server 240 users/ with CA server 416 users ⁴	
	5 users		
	10 users		
	40 users		
CA Supervisor	128 users	without CA server 4 users/ with CA server 128 users ⁴	
	1 user		
CA Operator Console	1 user	without CA server 128 users/ with CA server 128 users ⁴	
CA Network Plug-in	1 user	without CA server 240 users/ with CA server 1022 users ⁴	
	5 users		
	10 users		
	40 users		
CA Thin Client	128 users	1 activation key	
	Thin Client Server Connection		
CSTA Multiplexer	Multiple CSTA Connection	4 activation key	
CTI Licence			
3rd Party CTI link	CTI interface	1 activation key	
Partner Licence			
Polys Communication Bridge	KX-NSB0001	16 activation key	
Polys CCAccounting	KX-NSB0004	Combined total for licences: 350/system	
Polys CCAccounting A.L. ⁵	KX-NSB0005		
Polys CCAcc. Enterprise	KX-NSB0006		
Polys CCAcc. Enterprise A.L. ⁵	KX-NSB0007		
Polys CCView	KX-NSB0008		
Polys CCView A.L. ⁵	KX-NSB0009		
Polys CCView add. PBX	KX-NSB0010		
Polys CCView add. PBX A.L. ⁵	KX-NSB0011		
Polys Number notice (Polys Dialed Number Notification)	KX-NSB0012		
Polys Number notice (Polys Dialed Number Notification) A.L. ⁵	KX-NSB0013		
Polys CCRRecord SIP (4 ports)	KX-NSB0014		
Polys CCRRecord SIP A.L. ⁵ (4 ports)	KX-NSB0016		
Polys CA RCS-Start	1 user		128 users
	5 users		
	10 users		
	128 users		
	1 user		
Polys CA RCS-Extend	5 users	128 users	
	10 users		
	10 users		
	128 users		
	128 users		
Polys CCRRecord Analogue	4 users	24 users	
	8 users		
	12 users		
	16 users		
	24 users		
Polys CCRRecord Digital	4 users	24 users	
	8 users		
	12 users		
	16 users		
	24 users		
Polys CCRRecord Digital A.L. ⁵	8 users	24 users	
	12 users		
	16 users		
	16 users		
	24 users		
Polys CCRRecord PRI	1 port	2 ports	
	2 ports		
Polys CCRRecord PRI A.L. ⁵	1 port	2 ports	
	2 ports		
Polys CCView Supervisor	1 user	5 users	
	5 users		
Polys CCView Supervisor A.L. ⁵	1 user	5 users	
	5 users		
Polys CCView CRM P-up	1 user	5 users	
	5 users		
Polys CCView CRM P-up A.L. ⁵	1 user	5 users	
	5 users		
Polys CCAgent	1 user	5 users	
	5 users		
Polys CCAgent A.L. ⁵	1 user	5 users	
	5 users		

Specifications

		KX-NS500	KX-NS520
Main CPU		Cortex A8 600 MHz	Cortex A8 300 MHz
Power Input		100 V AC to 130 V AC; 2.2 A/200 V AC to 240 V AC; 1.3 A; 50 Hz/60 Hz	
Power Consumption (when fully mounted)		Normal rated power 104 VA	
Memory Backup Duration		7 years	
Dialling	Trunk	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling	
	Extension	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling	
Mode Conversion		DP-DTMF, DTMF-DP	
Ring Frequency		20 Hz/25 Hz (selectable)	
Operating Environment	Temperature	0 °C to 40 °C	
	Humidity	10 % to 90 % (non-condensing)	
Conference Call Trunk		32 party conference call (10 x 3-party conference call, 4 x 8-party conference call, etc.)	—
Music on Hold (MOH)		Internal MOH port: 2 ports (Level Control: -31.5 dB to +31.5 dB per 0.5 dB) External MOH port: 6 ports MOH: Selectable Internal/External Music Source port	—
External Paging		Maximum 6 ports (Volume Control: -15.5 dB to +15.5 dB per 0.5 dB)	—
LAN Port	1 (for LAN connection)	10BASE-T/100BASE-TX (Auto MDI/MDI-X)	—
Extension Connection Cable	SLT	1-pair wire (T, R)	
	DPT	1-pair wire (D1, D2)	
	APT	2-pair wire (T, R, D1, D2)	
	PT-interface CS	1-pair wire (D1, D2)	
	PT-interface CS (High-density)	4-pair wire (D1, D2)	
	DSS Console and Add-on Key Module	1-pair wire (D1, D2)	
Air-cooling Method		Fan	
Dimension		430 mm (W) x 367 mm (D) x 88 mm (H)	
Weight (when fully mounted)		Under 4.5 kg	

System Feature Capacity

	Item	Capacity		Item	Capacity	
System	Absent Message—Extension	1 x 16 characters	ARS	Routing Plan Table	48 entries	
	Absent Message—System	8 x 16 characters		Leading Number Table	16 digits, 1000 entries	
	Call Park Zone	100		Leading Number Exception Table	16 digits, 200 entries	
	Conference	3 – 8 parties per conference (32 parties total)		ARS Carrier	48	
	COS	64		Itemised Billing Code	10 digits	
	DID/DDI Table	32 digits, 1000 entries		Authorisation Code for Tenant	16 digits	
	Extension number	1 – 5 digits		Authorisation Code for Trunk Group	10 digits	
	Extension Personal Identification Number (PIN)	10 digits, 1 entry/extension		Call Log and Message Waiting	Outgoing Call Log—PT	100 records/extn. 1520 records/system
	Host PBX Access Code	10 digits, 10 entries/trunk group			Outgoing Call Log—PS	100 records/extn. 640 records/system
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port			Incoming Call Log—PT	100 records/extn. 3040 records/system
	Number of Characters of Name	20	Incoming Call Log—PS + Incoming Call Distribution Group		100 records/extn. or group Total 2560 records/system	
	Printing message	8	Message Waiting—PS + Incoming Call Distribution Group		256	
	Queuing Time Table	64	Message Waiting—PT + SLT		256	
	Ring Tone Pattern Plan	8	Voice Message	Outgoing Message (OGM)	64	
	Simultaneous Programmers	•one system programmer + 63 personal programmers •one manager programmer + 63 personal programmers •64 personal programmers		OGM Total Recording Time	Approx. 20 minutes	
	Simultaneous Programmers (Web Maintenance Console)	• one Installer level account • 32 User (User) and User (Administrator) level accounts		Build-in Simplified Voice Message (SVM)	125 messages	
	SMDR Call Storage	1000 calls (Without SD card)/40000 calls (With SD card)		SVM Total Recording Time	120 minutes	
	Charge Record for Hotel	1000 calls (Without SD card)/10000 calls (With SD card)		Number of Channel for SVM	2 ch	
	Special Carrier Access Code	16 digits, 20 entries	Hospitality and Charge Management Features	Billing items for guest rooms	1000 records/PBX (Without SD card)/ 10000 records/PBX (With SD card)	
	Tenant	8		Hotel Operator	4	
Time Service Holiday	24	Charge Rate		7 digits including a decimal		
Verification Code	4 digits, 1000 entries	Charge Denomination	3 currency characters/symbols			
Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries	Networking	TIE Line Routing and Modification Table	32 entries		
Emergency Call	32 digits, 10 entries		Leading Number	3 digits		
Hot Line	32 digits		PBX Code	7 digits		
Key Pad Protocol Dial (ISDN Service Access)	32 digits		NDSS: Monitored PBXs	8		
Personal Speed Dialling	32 digits, 100 entries/extn.		NDSS: Registered Extensions for Monitor PBX	250		
Quick Dialling	8 digits, 4000 entries	Unified Messaging	Mailboxes	500 subscriber mailboxes 1 System Manager mailbox 1 Message Manager mailbox		
Redial	32 digits		Total Recording Time	40h/200h/400h (SD XS/S/M)		
System Speed Dialling	32 digits, 1000 entries/tenant		Maximum Message Length	1 - 60 min (programmable) Unlimited for two-way recording		
One-touch Dialling—PT	32 digits, 5000 entries/system		Number of Channel for UM	24 ch		
One-touch Dialling—PS	32 digits, 1000 entries/system		Length of Personal Greeting	Max: 360s		
Conference Group	8 (8 members/group for Conference Group Mode, 32 members/group for Broadcast Mode)		Custom Service	Up to 200		
User Group	32		Group Distribution List	User: 4 groups, 40 members per group System: 20 groups, 200 members per group		
Call Pickup Group	64		Service Group	64 entries		
Idle Extension Hunting Group	64 (16 extensions/group)		Unified Messaging Ports	24 ports		
Incoming Call Distribution Group	128 (128 extensions/group)		Web Maintenance Console Accounts	Users (User)	492 accounts	
Paging Group	32	Users (Administrator)		8 accounts		
PS Ring Group	32	Installer		1 account		
Trunk Group	64	ACD Report	Password (all account types)	4 – 16 characters		
UM Group	1		Number of Call log for ACD report	300,000 ¹⁾		
VM (DPT) Group	2 units x 12 ports (24 channels)					
VM (DTMF) Group	2 groups x 32 channels					
P2P Group	32					
TRS/Barring Level	7					
TRS/Barring Denied Code	16 digits, 100 entries/level					
TRS/Barring Exception Code	16 digits, 100 entries/level					

¹⁾ Basis of the number 5,000 (calls per day); Ex: 25 (agent) x 20 (call/hour-agent) x 10 (hour/day)