

KX-NCP500 KX-NCP1000 Network Communication Platform

NCP500/1000 platforms are part of the Panasonic Unified Communication Solution.

System Capacity

Type		KX-NCP500	KX-NCP1000
Extension	Total Number of Extensions (DXDP)	64 (68)	104 (108)
	IP-Proprietary Telephone (IP-PT) - MPR	40	64
	SIP Telephone - MPR	32	64
	Single Line Telephone (SLT)	20	36
	Digital Proprietary Telephone (DPT) with DXDP	20 (24)	36 (40)
	DPT and SLT with DXDP	24 (28)	40 (44)
Trunk	Total Number of Trunks	72	96
	SIP Trunks - MPR	8	32
	H.323 - MPR	8	32
	PSTN Analogue Trunks	12	16
	ISDN - BRI	12 (6BRI)	16 (8BRI)
	ISDN - PRI30	60 (2PRI)	60 (2PRI)
	PSTN and ISDN	64	64
PS	DECT Wireless Handsets	64	64
CS	DECT Cell Stations (DPT I/F)	4	8
	High Density DECT Cell Station	2	4
	IP DECT Cell Station	8	8

Trunk card rules are as follows.

Total number of trunk cards accommodated in Small Slot/Regular Slot is up to 5. However, each PRI30 or E1 card is counted as 2 cards.

Extension card rules are as follows.

Total number of extension cards accommodated in Small Slot is up to 1.
Total number of extension cards accommodated in Regular Slot is up to 2 (NCP1000) / 1 (NCP500).
DPT can be connected to NCP1000 up to 36 (without DXDP) / 40 (with DXDP).
SLT+DPT can be connected to NCP1000 up to 44.
DPT can be connected to NCP500 up to 20 + 4DXDP.
SLT+DPT can be connected to NCP500 up to 24 + 4DXDP.

KX-NCP1000



KX-NCP500

Option List

Model	Description
Main Processing Card	Built-in IP Convergence Main Processing Card (IPCMR)
IPCMR Option Cards	KX-NCP1104 4-Channel VoIP DSP Card (DSP4)
	KX-TDE0110 16-Channel VoIP DSP Card (DSP16)
	KX-TDE0111 64-Channel VoIP DSP Card (DSP64)
	KX-TDA0196 Remote Card (RMT)
Activation Key	KX-NCP3102 2ch H.323 IP Gateway or 2ch SIP Trunk Activation Key
	KX-NCS3104 4ch H.323 IP Gateway or 4ch SIP Trunk Activation Key
	KX-NCP3201 1 IP softphone or 1 IP Proprietary Telephone Activation Key
	KX-NCS3208 8 IP softphone or 8 IP Proprietary Telephone Activation Key
	KX-NCP3501 1 IP Proprietary Telephone Activation Key
	KX-NCP3504 4 IP Proprietary Telephone Activation Key
	KX-NCS3508 8 IP Proprietary Telephone Activation Key
	KX-NCP3516 16 IP Proprietary Telephone Activation Key
	KX-NCP3701 1 SIP Telephone Activation Key
	KX-NCP3704 4 SIP Telephone Activation Key
	KX-NCP3708 8 SIP Telephone Activation Key
	KX-NCS3716 16 SIP Telephone Activation Key
	KX-NCS3910 Activation Key for Software Upgrade to Enhanced Version (Software Upgrade 01)
Small Slot - Trunk Cards	KX-NCP1180 4-Port Analogue Trunk Card (LCOT4)
	KX-NCP1280 2-Port BRI Card (BRI2)
	KX-NCP1290 PRI Card (PRI 30)
Extension Card	KX-NCP1170 4-Port Digital Hybrid Extension Card (DHLC4)
	KX-NCP1171 8-Port Digital Extension Card (DLC8)
	KX-NCP1172 16-Port Digital Extension Card (DLC16)
	KX-NCP1173 8-Port Single Line Telephone Extension Card (SLC8)
Regular Slot - Extension Cards	KX-NCP1174 16-Port Single Line Telephone Extension Card (SLC16)
	KX-NCP1188 E-1 Trunk Card (E1)
Trunk Card	KX-NCP1190 Optional 3-Slot Base Card (OPB3)
	KX-TDA0161 4-Port Doorphone Card (DPH4)
	KX-TDA0162G 2-Port Doorphone Card (German Type)(DPH2)
	KX-TDA0164 4-Port External Input/Output Card (EIO4)
	KX-TDA0166 16-Channel Echo Canceller Card (ECHO16)
	KX-TDA0192 2-Channel Simple Voice Message Card (ESVM2)
	KX-TDA0194 4-Channel Simple Voice Message Card (ESVM4)
	KX-TDA0141 2-Channel Cell Station Unit Using DHLC/DLC Card (DPT I/F) for DECT Potable Station
KX-NCP0158 8-Channel IP Cell Station Unit (IP Network Connection)	
Cell Stations (CSs)	KX-TDA0158 8-Channel High-Density Cell Station Unit Using a DHLC/DLC Card (DPT I/F) for DECT Potable Station
	Other KX-T7765 Doorphone

Compatible Panasonic Proprietary Telephones

The PBX supports the following telephones:

- IP Proprietary Telephones (KX-NT300 series, KX-NT400)
- IP softphones (e.g. KX-NCS8100, NCS8101)
- Digital Proprietary Telephones (e.g. KX-DT300, KX-T7600 series)
- Analogue Proprietary Telephones (e.g. KX-T7700 series)
- Portable Stations (e.g. KX-TCA355, KX-TCA175, KX-TCA275, KX-TCA256, KX-TCA155)
- DSS consoles (e.g. KX-T7640)

Specifications

KX-NCP500/1000	
Control Bus	Original bus (16-bit, 8 MHz, 10 megabytes per second)
Communication Bus	H.100 bus conformity (1024 time slots)
Power Input	100 V AC to 130 V AC; 1.0 A 200 V AC to 240 V AC; 0.5 A 50 Hz/60 Hz
Power Consumption	KX-NCP500: 47 W, KX-NCP1000 65W
Maximum Power Failure Tolerance	300 ms
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)
Trunk Loop Limit	1600 Ohm Maximum
Operating Environment	Temperature 0 C to 40 C (32 F to 104 F)
	Humidity 10 % to 90 % (non-condensing)
Conference Call Trunk	From 10 x 3-party conference call to 4 x 8-party conference call
Paging	Internal Level Control: -6 dB to +3 dB in 3 dB steps
	External 1 port (Volume Control: -15 dB to +6 dB in 3 dB steps)
RJ45 Port	MNT Port 1 (for PC connection)
	LAN Port 1 (for LAN connection)
Connection Cable	Trunk RJ45, BNC
	Extensions RJ45
	Paging Output 1 conductor jack
	External Voice Input 1 conductor jack
PT-interface CS	RJ45
Dimension	KX-NCP500 430 mm(W) x 86 mm(H) x 340 mm(D)
	KX-NCP1000 430 mm(W) x 128 mm(H) x 340 mm(D)
Weight (when fully mounted)	KX-NCP500 6.5kg
	KX-NCP1000 7.5kg

System Feature Capacity

Item	KX-NCP500	KX-NCP1000	Item	KX-NCP500	KX-NCP1000
System			ARS		
Absent Message-Extension	1 x 16 characters		Routing Plan Table	16 entries	
Absent Message-System	8 x 16 characters		Leading Number Table	16 digits, 1,000 entries	
Call Park Zone	100		Leading Number Exception Table	16 digits, 200 entries	
Conference	3-8 parties per conference (32 parties total)		ARS Carrier	10	
COS	64		Itemised Billing Code	10 digits	
DID/DDI Table	32 digits, 1,000 entries		Authorisation Code	10 digits	
Extension Number	10 digits, 1 entry/extension		Call Log and Message Waiting		
Extension Personal Identification Number (PIN)	1-5 digits (1-4 digits for PSs, 2-4 digits for extensions which have a VM [DPT] mailbox)		Outgoing Call Log - PT	100 records/extn. 1,520 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. 3,040 records/system	
Number of the Characters of Name	20		Message Waiting - PS + Incoming Call Distribution Group	256	
Printing Message	8		Incoming Call Log - PS + Incoming Call Distribution Group	100 records/extn. or group Total 2,048 records/system	
Queuing Time Table	64		Message Waiting - PT + SLT	512	
Ring Tone Pattern Plan	8		Voice Message		
Simultaneous Programmers	<ul style="list-style-type: none"> • one system + 63 personal programmers • one manager + 63 personal programmers • 64 personal programmers 		Outgoing Message (OGM)	64	
SMDR Call Storage	200 calls		OGM Total Recording Time	8 minutes (MSG4)	
Special Carrier Access Code	16 digits, 20 entries		SVM Total Recording Time	40, 60, or 120 minutes (depending on the recording quality)	
Tenant	8		Built-in Voice Message (ESVM2)	125 messages	
Time Service Holiday	24		Optional Voice Message (ESVM2, ESVM4)	250 messages	
Verification Code	4 digits, 1,000 entries		Hospitality and Charge Management Features		
Verification Code Personal Identification Number (PIN)	10 digits, 1,000 entries		Billing Items for Guest Rooms	4,000 records/PBX	
Dialling			Hotel Operator	4	
Emergency Call	32 digits, 10 entries		Charge Rate	7 digits including a decimal	
Hot Line	32 digits		Charge Denomination	3 currency characters/symbols	
Key Pad Protocol Dial (ISDN Service Access)	32 digits		Networking		
Personal Speed Dialling	32 digits, 100 entries/extn.		TIE Line Routing and Modification Table	32 entries	
Quick Dialling	8 digits, 4,080 entries		Leading Number	3 digits	
Redial	32 digits		PBX Code	7 digits	
System Speed Dialling	32 digits, 1,000 entries/tenant		NDSS: Monitored PBXs	8	
Groups			NDSS: Registered Extensions for Monitor PBX	250	
Broadcasting Group	8 (32 members/group)		CTI		
Call Pickup Group	64		PC Console	8	
Idle Extension Hunting Group	64 (16 extensions/group)		PC Phone	64	128
Incoming Call Distribution Group	128 (32 extensions/group)		Password		
Paging Group	32		System Password for Installer	4 - 10 characters	
PS Ring Group	32		System Password for Administrator — for PC Programming	4 - 10 characters	
Trunk Group	64		System Password for User — for PC Programming	4 - 10 characters	
VM (DPT) Group	2 groups x 12 ports (24 channels)		System Password for Administrator — for PT Programming	4 - 10 digits	
VM (DTMF) Group	2 groups x 32 channels		System Password for User — for PT Programming	4 - 10 digits	
TRS/Barring			Manager Password	4 - 10 digits	
TRS/Barring Level	7		Programmer Code		
TRS/Barring Denied Code	16 digits, 100 entries/level		Installer Level Programmer Code	4 - 16 characters	
TRS/Barring Exception Code	16 digits, 100 entries/level		Administrator Level Programmer Code	4 - 16 characters	
			User Level Programmer Code	0 - 16 characters	

Maximum Number of VoIP Channels

VoIP Codec Used	KX-NCP500			KX-NCP1000		
	DSP4	DSP16	DSP64	DSP4	DSP16	DSP64
G729	4	16	64	4	16	64
G711	16	64	128	16	64	128

DSP Options Capacity per NCP System

Codec Transcoding	KX-NCP500			KX-NCP1000		
	DSP4	DSP16	DSP64	DSP4	DSP16	DSP64
G711 ↔ G711	8	8	8	8	32	32
G711 ↔ G729	3	8	8	3	12	32
G729 ↔ G729	2	8	8	2	8	32