

## 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	<b>Total Number of Extensions (DXDP)</b>	<b>152 (156)</b>	<b>168 (172)</b>
	IP-Proprietary Telephone (IP-PT) - MPR	128	128
	SIP Telephone - MPR	32	64
	Single Line Telephone (SLT)	20	36
	Digital Proprietary Telephone (DPT) with DXDP	20 (24)	36 (44)
Trunk	<b>Total Number of Trunks</b>	<b>72</b>	<b>96</b>
	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)
PS	DECT Wireless Handsets	64	64
	DECT Cell Stations (DPT I/F)	4	8
CS	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.

### Option List

	Model	Description
Main Processing Card	Built-in	IP Convergence Main Processing Card (IPCMPR)
IPCMPR 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-NCS3102	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-NCS3201	1 IP softphone or 1 IP Proprietary telephone Activation Key
	KX-NCS3204	4 IP softphone or 4 IP Proprietary telephone Activation Key
	KX-NCS3208	8 IP softphone or 8 IP Proprietary telephone Activation Key
	KX-NCS3216	16 IP softphone or 16 IP Proprietary telephone Activation Key
	KX-NCS3501	1 IP Proprietary telephone Activation Key
	KX-NCS3504	4 IP Proprietary telephone Activation Key
	KX-NCS3508	8 IP Proprietary telephone Activation Key
	KX-NCS3516	16 IP Proprietary telephone Activation Key
	KX-NCS3701	1 SIP Telephone Activation Key
	KX-NCS3704	4 SIP Telephone Activation Key
	KX-NCS3708	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 (LC014)
	KX-NCP1280	2-Port BRI Card (BRI2)
	KX-NCP1290	PRI Card (PRI 30)
Extension Card	KX-NCP1170	4-Port Digital Hybrid Extension Card (DHLC4)
Regular Slot - Extension Cards	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)
	KX-NCP1174	16-Port Single Line Telephone Extension Card (SLC16)
	KX-NCP1188	E-1 Trunk Card (E1)
Option Cards for OPB3	KX-NCP1190	Optional 3-Slot Base Card (OPB3)
	KX-TDA0161	4-Port Doorphone Card (DPH4)
	KX-TDA0162	2-Port Doorphone Card (German Type)(DPH2)
	KX-TDA0164	4-Port External Input/Output Card (EI04)
	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-TDA0155	2-Channel Cell Station Unit Using DHLC/DLC Card (DPT I/F) for DECT Portable Station
Cell Stations (CSs)	KX-NCP0158	8-Channel IP Cell Station Unit (IP Network Connection)
	KX-TDA0158	8-Channel High-Density Cell Station Unit Using a DHLC/DLC Card (DPT I/F) for DECT Portable Station
	KX-T7765	Doorphone

#### Compatible Panasonic Proprietary Telephones

The PBX supports the following telephones:

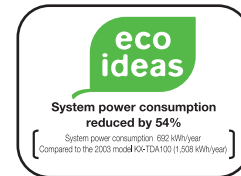
- IP Proprietary Telephones (KX-NT300 series, KX-NT400)
- IP softphones (e.g. KX-NCS8100, NCS8101)
- Digital Proprietary Telephones (e.g. KX-DT300, KX-T7600 series)
- Analogue Proprietary Telephones (e.g. KX-T7700 series)
- Portable Stations (e.g. KX-TCA355, KX-TCA175, KX-TCA275, KX-TCA256, KX-TCA155)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



KX-NCP1000



KX-NCP500



### 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 part 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
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
<b>System</b>		
Absent Message-Extension	1 x 16 characters	
Absent Message-System	8 x 16 characters	
Call Park Zone	100	
Conference	3-8 parties per conference (32 parties total)	
CUS	64	
DID/DDI Table	32 digits, 1,000 entries	
Extension Number	10 digits, 1 entry/extension	
Extension Personal Identification Number (PIN)	1-5 digits (1-4 digits for PSs, 2-4 digits for extensions which have a VM (DPT) mailbox)	
Host PBX Access Code	10 digits, 10 entries/trunk group	
Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port	
Number of the Characters of Name	20	
Printing Message	8	
Queuing Time Table	64	
Ring Tone Pattern Plan	8	
Simultaneous Programmers	<ul style="list-style-type: none"> <li>• one system + 63 personal programmers</li> <li>• one manager + 63 personal programmers</li> <li>• 64 personal programmers</li> </ul>	
SMDR Call Storage	200 calls	
Special Carrier Access Code	16 digits, 20 entries	
Tenant	8	
Time Service Holiday	24	
Verification Code	4 digits, 1,000 entries	
Verification Code Personal Identification Number (PIN)	10 digits, 1,000 entries	
<b>Dialling</b>		
Emergency Call	32 digits, 10 entries	
Hot Line	32 digits	
Key Pad Protocol Dial (ISDN Service Access)	32 digits	
Personal Speed Dialling	32 digits, 100 entries/extn.	
Quick Dialling	8 digits, 4,080 entries	
Redial	32 digits	
System Speed Dialling	32 digits, 1,000 entries/tenant	
<b>Groups</b>		
Broadcasting Group	8 (32 members/group)	
Call Pickup Group	64	
Idle Extension Hunting Group	64 (16 extensions/group)	
Incoming Call Distribution Group	128 (32 extensions/group)	
Paging Group	32	
PS Ring Group	32	
Trunk Group	64	
VM (DPT) Group	2 groups x 12 ports (24 channels)	
VM (DTMF) Group	2 groups x 32 channels	
<b>TRS/Barring</b>		
TRS/Barring Level	7	
TRS/Barring Denied Code	16 digits, 100 entries/level	
TRS/Barring Exception Code	16 digits, 100 entries/level	

Item	KX-NCP500	KX-NCP1000
<b>ARS</b>		
Routing Plan Table	16 entries	
Leading Number Table	16 digits, 1,000 entries	
Leading Number Exception Table	16 digits, 200 entries	
ARS Carrier	10	
Itemised Billing Code	10 digits	
Authorisation Code	10 digits	
<b>Call Log and Message Waiting</b>		
Outgoing Call Log - PT	100 records/extn. 1,520 records/system	
Outgoing Call Log - PS	100 records/extn. 640 records/system	
Incoming Call Log - PT	100 records/extn. 3,040 records/system	
Message Waiting - PS + Incoming Call Distribution Group	256	
Incoming Call Log - PS + Incoming Call Distribution Group	100 records/extn. or group Total 2,048 records/system	
Message Waiting - PT + SLT	512	
<b>Voice Message</b>		
Outgoing Message (OGM)	64	
OGM Total Recording Time	8 minutes (MS64)	
SVM Total Recording Time	40, 60, or 120 minutes (depending on the recording quality)	
Built-in Voice Message (ESVM2)	125 messages	
Optional Voice Message (ESVM2, ESVM4)	250 messages	
<b>Hospitality and Charge Management Features</b>		
Billing Items for Guest Rooms	4,000 records/PBX	
Hotel Operator	4	
Charge Rate	7 digits including a decimal	
Charge Denomination	3 currency characters/symbols	
<b>Networking</b>		
TIE Line Routing and Modification Table	32 entries	
Leading Number	3 digits	
PBX Code	7 digits	
NDSS: Monitored PBXs	8	
NDSS: Registered Extensions for Monitor PBX	250	
<b>CTI</b>		
PC Console	8	
PC Phone	64	128
<b>Password</b>		
System Password for Installer	4 - 10 characters	
System Password for Administrator — for PC Programming	4 - 10 characters	
System Password for User — for PC Programming	4 - 10 characters	
System Password for Administrator — for PT Programming	4 - 10 digits	
System Password for User — for PT Programming	4 - 10 digits	
Manager Password	4 - 10 digits	
<b>Programmer Code</b>		
Installer Level Programmer Code	4 - 16 characters	
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		
IP-Trunk   IP-PT or SIP Ext.	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