

# PRODUCT GUIDE AND SPECIFICATIONS

## KX-NCP500 KX-NCP1000

PGMPR SOFTWARE FILE VERSION 5.0



KX-NCP500

KX-NCP1000

SYSTEM CAPACITY		
<b>TYPE AND MAXIMUM NUMBER OF SLOTS</b> The PBX supports the following type and number of slots		
SLOT TYPE	KX-NCP500	KX-NCP1000
IPCMR Card Slot	1	1
Regular Free Slot	2	3
Small Free Slot	3	4
Virtual Trunk Slot	4	4
Virtual Slot	4	4
Virtual Extension Slot		

MAXIMUM TRUNKS AND EXTENSIONS		
The PBX supports the following number of trunks and extensions.		
TYPE	Maximum Number	
<b>TOTAL NUMBER OF TRUNKS</b>		
Trunk (Physical Trunk Card)	128	
Trunk (Virtual Trunk Card)	64	
H.323 Trunks	64	
SIP Trunks	32	
<b>TOTAL NUMBER OF EXTENSIONS</b>	172	
Extension (Physical Extension Card)	64	
Extension (Virtual Extension Card)	44	
IP-PT and IP Softphone	128	
SIP Phone	128	

MAXIMUM TERMINAL EQUIPMENT		
The following shows the number of each terminal equipment type supported by the PBX.		
TELEPHONE		
SLT	172	
KX-DT300/KX-T7600 series DPT	36	
Other DPT	40	
APT	10	
IP-PT**	4	
SIP Extension	128 <sup>†</sup>	
<b>DSS CONSOLE</b>	128	
<b>CS</b>	8	
PT-interface CS (2-channel)	21 <sup>‡</sup>	
PT-interface CS (8-channel)	11	
IP-CS (8-channel)	5	
PS	16	
Voice Processing System (VPS)	64	
Doorphone	2	
Door Opener	16 <sup>¶</sup>	
External Sensor	16	
External Relay	16	

<sup>†</sup> KX-NT400, KX-NT300 series, and KX-NT265 (software version 2.00 or later only)

<sup>‡</sup> For the KX-NT400, the maximum number of extensions that can be connected to the PBX is 64.

<sup>§</sup> One 8-channel PT-interface CS or IP-CS counts as 2 CSs, up to a maximum of 32 CSs. Therefore, the maximum number of CSs is 21 (eleven 2-channel CSs + ten 8-channel CSs).

<sup>¶</sup> For the KX-NCP500, when using the DPHZ card, the maximum number of doorphones is 12.

OPTION LIST	Model	Description
<b>IPCMR OPTION CARDS</b>		
	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)
<b>ACTIVATION KEY CODES<sup>†</sup></b>		
	KX-NCS3102	2-Channel IP Trunk Activation Key
	KX-NCS3104	4-Channel IP Trunk Activation Key
	KX-NCS3201	1-Channel IP Softphone/IP Proprietary Telephone Activation Key
	KX-NCS3204	4-Channel IP Softphone/IP Proprietary Telephone Activation Key
	KX-NCS3208	8-Channel IP Softphone/IP Proprietary Telephone Activation Key
	KX-NCS3216	16-Channel IP Softphone/IP Proprietary Telephone Activation Key
	KX-NCS3501	1-Channel IP Proprietary Telephone Activation Key
	KX-NCS3504	4-Channel IP Proprietary Telephone Activation Key
	KX-NCS3508	8-Channel IP Proprietary Telephone Activation Key
	KX-NCS3516	16-Channel IP Proprietary Telephone Activation Key
	KX-NCS3701	1-Channel SIP Extension Activation Key
	KX-NCS3704	4-Channel SIP Extension Activation Key
	KX-NCS3708	8-Channel SIP Extension Activation Key
	KX-NCS3716	16-Channel SIP Extension Activation Key
	KX-NCS3910	Activation Key for Enhanced Features
	KX-NCS2010	Activation Key for CA Thin Client
	KX-NCS2020	Activation Key for CSTA Multiplexer
	KX-NCS2201	Activation Key for CA PRO for 1 User
	KX-NCS2205	Activation Key for CA PRO for 5 Users
	KX-NCS2210	Activation Key for CA PRO for 10 Users
	KX-NCS2240	Activation Key for CA PRO for 40 Users
	KX-NCS2249	Activation Key for CA PRO for 128 Users
	KX-NCS2301	Activation Key for CA ACD Monitor for 1 ICD Supervisor
	KX-NCS2401	Activation Key for CA Operator Console 1 User
	KX-NCS2901	Activation Key for CA Network 1 User
	KX-NCS2905	Activation Key for CA Network 5 Users
	KX-NCS2910	Activation Key for CA Network 10 Users
	KX-NCS2940	Activation Key for CA Network 40 Users
	KX-NCS2949	Activation Key for CA Network 128 Users
	KX-NCS3930	Activation Key for Third Party CTI
<b>SMALL FREE SLOT</b>		
Physical Trunk Cards	KX-NCP1280	4-Port Analogue Trunk Card (LLOT4)
	KX-NCP1280	2-Port BRI Card (BRI2)
	KX-NCP1290	PRI Card
Physical Extension Card	KX-NCP1170	4-Port Digital Hybrid Extension Card (DHLCA)
<b>REGULAR FREE SLOT</b>		
Physical Trunk Cards	KX-NCP1188	E-1 Trunk Card (E1)
Physical 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)
Other Physical Card	KX-NCP1190	Optional 3-Slot Base Card (OPB3)
<b>OPB3</b>		
Other Physical Cards	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 (ECH016)
	KX-TDA0191	4-Channel Message Card (MSG4)
	KX-NCP0192	2-Channel Simplified Voice Message Card (ESVM2)
	KX-TDA0194	4-Channel Simplified Voice Message Card (ESVM4)
<b>CELL STATIONS (CSS)</b>		
DECT	KX-TDA0155	2-Channel Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Portable Station
	KX-TDA0158	8-Channel High-density Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Portable Station
	KX-NCP0158	8-Channel IP Cell Station Unit Using a V-IPCS4 Card for DECT Portable Station
<b>PROPRIETARY EQUIPMENT</b>		
	KX-T30865	Doorphone
	KX-T7765	Doorphone

<sup>†</sup> Note that the types of activation keys are subject to change without notice. For CA activation keys, refer to the documentation for CA.

### Compatible Panasonic Proprietary Telephones

The PBX supports the following telephones:

- IP proprietary telephones (e.g., KX-NT300 series) • IP softphones (e.g., KX-NCS8100) • Digital proprietary telephones (e.g., KX-DT300 series)
- Analogue proprietary telephones (e.g., KX-T7700 series)
- Portable stations (e.g., KX-WT115, KX-TCA356, KX-TCA275) • DSS consoles (e.g., KX-DT390)
- Single Line telephones (e.g., KX-T7710)

### Incompatible Panasonic Proprietary Telephones

The PBX does not support the following telephones:

- KX-T30800 series proprietary telephones and DSS consoles • KX-T61600 series proprietary telephones and DSS consoles
- KX-T123200 series proprietary telephones and DSS consoles • KX-DT7500 DECT portable station
- KX-NT136 IP proprietary telephone • KX-NT265 IP proprietary telephone (apart from software version 2.00 or later)

**Note:** Some models will be exported to limited region. Please contact our dealer and confirm the availability of specific models in your region.

SYSTEM FEATURE CAPACITY		KX-NCP500	KX-NCP1000
	Item		
SYSTEM	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)	
	CDS	64	
	DID/ODI Table	32 digits, 1000 entries	
	Extension number	1 - 5 digits	
	Extension Personal Identification Number (PIN)	10 digits, 1 entry/extension	
	Host PBX Access Code	10 digits, 10 entries/trunk group	
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port	
	Number of Characters of Name	20	
	Printing message	8	
	Queuing Time Table	64	
	Ring Tone Pattern Plan	8	
	Simultaneous Programmers	- one system programmer + 63 personal programmers - one manager programmer + 63 personal programmers - 64 personal programmers	
	SMDR Call Storage	200 calls	
	Special Carrier Access Code	16 digits, 20 entries	
	Tenant	8	
	Time Service Holiday	24	
Verification Code	4 digits, 1000 entries		
Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries		
DIALLING	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, 4080 entries	
	Redial	32 digits	
	System Speed Dialling	32 digits, 1000 entries/tenant	
	One-touch Dialling—PT/DSS	32 digits, 2000 entries/system	
	One-touch Dialling—PS	32 digits, 500 entries/system	
	GROUPS	Conference Group	8 (8 members/group for Conference Group Mode, 32 members/group for Broadcast Mode)
Call Pickup Group		64	
Idle Extension Hunting Group		64 (16 extensions/group)	
Incoming Call Distribution Group		128 (128 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	
TRS/BARRING		TRS/Barring Level	7
	TRS/Barring Denied Code	16 digits, 100 entries/level	
	TRS/Barring Exception Code	16 digits, 100 entries/level	
ARS	Routing Plan Table	16 entries	
	Leading Number Table	16 digits, 1000 entries	
	Leading Number Exception Table	16 digits, 200 entries	
	ARS Carrier	10	
	Itemised Billing Code	10 digits	
	Authorisation Code for Tenant	16 digits	
Authorisation Code for Trunk Group	10 digits		
CALL LOG AND MESSAGE WAITING	Outgoing Call Log—PT	100 records/extn, 840 records/system	
	Outgoing Call Log—PS	100 records/extn, 320 records/system	
	Incoming Call Log—PT	100 records/extn, 1680 records/system	
	Incoming Call Log—PS + Incoming Call Distribution Group	100 records/extn. or group Total 1536 records/system 192	
	Message Waiting—PS + Incoming Call Distribution Group	192	
	Message Waiting—PT + SLT	512	
VOICE MESSAGE	Outgoing Message (OGM)	64	
	OGM Total Recording Time	MSG4 Card: 8 minutes; MPR/ESVM2/ESVM4 Card: 20 minutes (at High recording quality)	
	Built-in Simplified Voice Message (SVM)	MPR Card: 125 messages; ESVM2/ESVM4 Card: 250 messages per card/block	
	SVM Total Recording Time	20, 60, or 120 minutes (depending on the recording quality)	
HOSPITALITY AND CHARGE MANAGEMENT FEATURES	Billing Items for guest rooms	1000 records/PBX	
	Hotel Operator	4	
	Charge Rate	7 digits including a decimal	
Charge Denomination	3 currency characters/symbols		
NETWORKING	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	
CTI	PC Console	8	8
	PC Phone	20	36
PASSWORD	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 User— for PT Programming	4 - 10 digits	
	System Password for User— for PT Programming	4 - 10 digits	
	Manager Password	4 - 10 digits	
PROGRAMMER CODE	Installer Level Programmer Code	4 - 16 characters	
	Administrator Level Programmer Code	4 - 16 characters	
	User Level Programmer Code	0 - 16 characters	

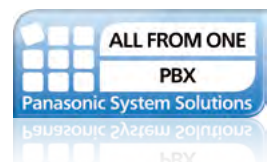


SPECIFICATIONS		KX-NCP500/1000
Control Bus		Original bus (16-bit, 8 MHz, 10 megabytes per second)
Communication Bus		H.100 bus conformity (1024 time slots)
Switching		Non-blocking
POWER INPUT	KX-NCP500	100 V AC to 130 V AC; 1.0 A/200 V AC to 240 V AC; 0.6 A; 50 Hz/60 Hz
	KX-NCP1000	100 V AC to 130 V AC; 1.3 A/200 V AC to 240 V AC; 0.8 A; 50 Hz/60 Hz
Power Consumption (When fully mounted)	KX-NCP500	51 W (240V:122VA, 200V:113VA, 130V:100VA, 100V: 92VA)
	KX-NCP1000	65 W (240V:142VA, 200V:134VA, 130V:119VA, 100V: 113VA)
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-DTME, DTMF-DP
Ring Frequency		20 Hz/25 Hz (selectable)
Trunk Loop Limit		1600 Ω maximum
OPERATING ENVIRONMENT	Temperature	0 °C to 40 °C
	Humidity	10 % to 90 % (non-condensing)
Conference Call Trunk		From 10 x 3-party conference call to 4 x 8-party conference call
Music on Hold (MOH)		1 port (Level Control: -6 dB to +6 dB per 3 dB) MOH1: Selectable Internal/External Music Source port
PAGING	Internal	Level Control: -6 dB to +3 dB per 3 dB
	External	1 port (Volume Control: -15 dB to +6 dB per 3 dB)
Serial Interface Port	RS-232C	1 (maximum 115.2 kbps)
RJ45 PORT	MINT Port	1 (for PC connection)
	LAN Port	1 (for LAN connection)
Extension Connection Cable	SLT	
	DPT	
	APT	
		PT-interface CS (2-channel) PT-interface CS (8-channel) DSS Console and Add-on Key Module
DIMENSION	KX-NCP500	430 mm (W) x 88 mm (H) x 340 mm (D)
	KX-NCP1000	430 mm (W) x 130 mm (H) x 340 mm (D)
Weight (when fully mounted)	KX-NCP500	Under 7 kg
	KX-NCP1000	Under 8 kg

\* If tolerance may be exceeded, an Uninterruptible Power Supply (UPS) is recommended.

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We expressly reserve the right to make reasonable changes to models, dimensions, colours as well as to make modifications that bring our products in line with state-of-the-art technology.