



## KX-NS500 BUSINESS COMMUNICATIONS SOLUTION GREATER ACCESSIBILITY. HIGHER QUALITY COMMUNICATIONS.

For any small or medium-sized business looking to take advantage of Panasonic's reputation for quality technology, without needing a huge budget, the new KX-NS500 unified communication solution provides the answers. This smart hybrid PBX is a cost-effective legacy and IP communication system for companies with up to 250 employees, that can be flexibly configured and expanded according to the specific requirements of their business.

The KX-NS500 has advanced features and starts from six analogue trunks and 18 extensions, up to 288 extensions with an Expansion Unit. The KX-NS500 is also a unified communication system which has rich IP features, such as mobile linking, integrated voicemail and e-mail, instant messaging (chat), and presence information.

It can also use built-in applications such as a call centre solution, mobile solution and voicemail system to provide more efficient work and increased customer satisfaction.

### KEY FEATURES

- Smart hybrid PBX system for small and medium-sized businesses
- Expand from six analogue trunks and 18 extensions, up to 288 extensions with Expansion Unit
- Cost-effective installation and operation
- Built-in applications include call centre solution, mobile solution and voicemail
- Easy evolution from analogue to IP communications



KX-TCA385 - New DECT Phone



KX-DT546 - New Digital Terminal



Call Centre Solution

# THE SYSTEM THAT GROWS WITH YOUR BUSINESS

## BUILT-IN AUTO ATTENDANT

As a standard feature, the KX-NS500 can connect customers to the appropriate section or operator according to their query in call routing with voice guidance. It can also prompt the customers to leave a voice message when the operator is away.

## USE EXISTING RESOURCES

Existing analogue PTs and digital PTs from Panasonic can continue to be used, enabling a system to be replaced at a low cost without wasting resources.

## ENHANCED VOICEMAIL

The KX-NS500 can be expanded to a voicemail system that can record a maximum of 24 channels at the same time and store up to 400 hours. It also sends an e-mail to notify users when they have new voice messages. The messages can also be received as attachment files and forwarded. E-mail notification can also be sent for missed calls where the customer did not leave a message, enabling users to quickly contact the customer.

## CALL CENTRE SOLUTION

The KX-NS500 includes an advanced call routing function for small to medium size call centres. This function can be used without an external CTI server. More efficient call reception enables you to effectively utilise limited resources to assist in improving customer service.

## AUTO-RECORDING AND BACKING-UP CONVERSATIONS

The voicemail system function can be used to automatically record conversations with customers. The recorded voice data can be automatically saved to USB memory or an external server via the internet, and listened when required. The data can be used to understand problems or opportunities relating to customer service.

## COMPATIBLE WITH MODERN, STYLISH PHONES

Using Panasonic's latest wireless and desk applications.

# 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/60Hz	
Power Consumption (when fully mounted)		110 W	
External Backup Battery		External battery port is supported	
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		From 10 x 3-party conference call to 4 x 8-party conference call	-
Music on Hold (MOH)		Maximum 8 ports (Level Control: -31.5 dB to +31.5 dB per 0.5 dB) 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)	-
Extension Connection Cable	SLT	10BASE-T/100BASE-TX (Auto MDI/MDI-X)	-
	DPT	1-pair wire (T, R)	
	PT-interface CS	1-pair wire (D1, D2) or 2-pair wire (T, R, D1, D2)	
	PT-interface CS (High-density)	1-pair wire (D1, D2)	
	DSS Console and Add-on Key Module	4-pair wire (D1, D2)	
Air-cooling Method		1-pair wire (D1, D2)	
Fan		Fan	
Dimension		430 mm (W) x 88 mm (H) x 367 mm (D)	
Weight (when fully mounted)		Under 4.5 kg	

# SYSTEM CAPACITY

## MAXIMUM TRUNKS

THE PBX SUPPORTS THE FOLLOWING NUMBER OF TRUNKS.

TYPE		KX-NS500	With 1 KX-NS520	With 2 KX-NS520	With 3 KX-NS520
<b>Total Number of Trunks</b>		<b>100 ch</b>	<b>130 ch</b>	<b>160 ch</b>	<b>190 ch</b>
Legacy		36 ch	66 ch	96 ch	126 ch
	PRI30	30 ch	60 ch	90 ch	120 ch
	E1	30 ch	60 ch	90 ch	120 ch
IP	Analogue	12 lines	24 lines	36 lines	48 lines
		64 ch	64 ch	64 ch	64 ch
	H.323	32 ch	32 ch	32 ch	32 ch
	SIP	64 ch	64 ch	64 ch	64 ch

## MAXIMUM TERMINAL EQUIPMENT

THE FOLLOWING SHOWS THE NUMBER OF EACH TERMINAL EQUIPMENT TYPE SUPPORTED BY THE PBX.

TYPE		KX-NS500	With 1 KX-NS520	With 2 KX-NS520	With 3 KX-NS520
<b>Extensions (DXDP*)</b>		<b>162 (168)</b>	<b>194 (208)</b>	<b>226 (248)</b>	<b>258 (288)</b>
Legacy (DXDP*)		34 (40)	66 (80)	98 (120)	130 (160)
	SLT	32	64	96	128
	DPT (DXDP*)	18 (24)	34 (48)	50 (72)	66 (96)
	APT	8	16	24	32
IP		128	128	128	128
	IP-PT**	128	128	128	128
	SIP	128	128	128	128
	SIP Phone**3	128	128	128	128
	S-PS	128	128	128	128
DSS Console		8	8	8	8
CS		20	24	28	32
	DPT-CS (2 ch) / (8 ch)	4 / 2	8 / 4	12 / 6	16 / 8
IP-CS/SIP-CS		16	16	16	16
PS		128	128	128	128
VM					
ESVM (ch)		2	2	2	2
Built-in UM (ch)		24	24	24	24
TVM Unit		2	2	2	2
Doorphone		2	4	6	8
Door Opener		2	4	6	8
External Sensor		2	4	6	8

\*1 When Digital XDP is used.

\*2 KX-NT500 series, KX-NT300 series, and KX-NT265 (software version 2.00 or later only).

\*3 KX-UT Series, KX-NT700 and third party SIP phones (SIP hardphones/SIP softphones).



# SYSTEM FEATURE CAPACITY

	ITEM	CAPACITY	
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)	
	COS	64	
	DID/DDI 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	
	Number of Characters of Name	20	
	Printing message	8	
	Queuing Time Table	64	
	Ring Tone Pattern Plan	8	
	Simultaneous Programmers	One manager programmer + 32 personal programmers	
	SMDR Call Storage	1000 calls (Without SD card)/40000 calls (With SD card)	
	Special Carrier Access Code	16 digits, 20 entries	
	Tenant	8	
	Time Service Holiday	24	
	Verification Code	4 digits, 1000 entries	
	Dialling	Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries
Emergency Call		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, 4000 entries	
Redial		32 digits	
System Speed Dialling		32 digits, 1000 entries/tenant	
One-touch Dialling—PT		32 digits, 5000 entries/system	
One-touch Dialling—PS		32 digits, 1000 entries/system	
Groups		Conference Group	32 (32 members/group for Conference Group Mode, 32 members/group for Broadcast Mode)
		User Group	32
		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	
	UM Group	1	
	VM (DPT) Group	2 units x 12 ports (24 channels)	
TRS/Barring	VM (DTMF) Group	2 groups x 32 channels	
	P2P Group	32	
	TRS/Barring Level	7	
	TRS/Barring Denied Code	16 digits, 100 entries/level	
ARS	TRS/Barring Exception Code	16 digits, 100 entries/level	
	Routing Plan Table	48 entries	
	Leading Number Table	16 digits, 1000 entries	
	Leading Number Exception Table	16 digits, 200 entries	
	ARS Carrier	48	
	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. 1520 records/system	
	Outgoing Call Log—PS	100 records/extn. 640 records/system	
	Incoming Call Log—PT	100 records/extn. 3040 records/system	
	Incoming Call Log—PS + Incoming Call Distribution Group	100 records/extn. or group Total 2560 records/system	
	Message Waiting—PT + SLT	256	
Voice Message	Message Waiting—PT + SLT	256	
	Outgoing Message (OGM)	64	
	OGM Total Recording Time	Approx. 20 minutes	
Hospitality and Charge Management Features	Build-in Simplified Voice Message (SVM)	125 messages	
	SVM Total Recording Time	120 minutes	
	Billing items for guest rooms	1000 records/PBX (Without SD card)/ 10000 records/PBX (With SD card)	
	Hotel Operator	4	
Networking	Charge Rate	7 digits including a decimal	
	Charge Denomination	3 currency characters/symbols	
	TIE Line Routing and Modification Table	32 entries	
	Leading Number	3 digits	
	PBX Code	7 digits	
Unified Messaging	NDSS: Monitored PBXs	8	
	NDSS: Registered Extensions for Monitor PBX	250	
	Mailboxes	500 subscriber mailboxes 1 System Manager mailbox 1 Message Manager mailbox	
	Group Distribution List	User: 4 groups, 40 members per group System: 20 groups, 200 members per group	
	Service Group	64 entries	
Web Maintenance Console Accounts	Unified Messaging Ports	24 ports	
	Users (User)	500 accounts	
	Users (Administrator)	8 accounts	
	Installer	1 account	
	Password (all account types)	4 – 16 characters	