Panasonic
BUSINESS

KX-NS1000V3
BUSINESS COMMUNICATIONS SERVER

DISCOVER A WORLD OF BENEFITS IN ONE BUSINESS COMMUNICATIONS SOLUTION

Business communication servers must provide solutions to real-world business challenges, such as: simplifying and improving communications; lowering costs; improving productivity; supporting SOHOs; and diversifying of the workplace. They should do all of these while flexibly adapting to the way each organisation works. The KX-NS1000 Business Communications Server by Panasonic is designed to deliver these solutions. It does this by integrating hardware and software components in a modular way, allowing you to tailor a communications system to your specific needs.

Furthermore, users of an existing Panasonic legacy PBX can easily migrate to an IP system by connecting a KX-NS1000 server. Legacy systems can also be expanded to perform partial migration according to the available budget.
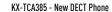
You can easily integrate your system with the KX-NS1000, depending on your specific needs or budget, because the KX-NS1000 is suitable for all kinds of businesses and industries, such as sales, customer service, hospitality, healthcare, and home teleworkers.

KEY FEATURES

- IP and SIP network communication server
- Integrated unified messaging with up to 24 ports per unit
- Build systems for up to 8,000 users
- Reliable backup system to survive system failures
- Call centre solution with voice guidance for customers
- High-performance applications

KX-NT556 - New IP Terminal

KX-TCA385 - New DECT Phone

Improved call centre solution

WHAT'S NEW ABOUT THE KX-NS1000V3?

EASY SETUP

Even in remote locations, such as the homes of teleworkers, IP phones can be easily installed from a single site and used as extensions. The same method can be used to extend a VPN to the entire office network for more secure communication.

GRADUAL IP MIGRATION TO SUIT YOUR BUDGET

In addition to customers seeking total IP migration, the KX-NS1000 supports phased implementation of future IP migration for customers that wish to use existing equipment.

CALL CENTRE SOLUTION

Voice guidance for customers and call data can be output to reports and analysed for improved customer satisfaction. Call data can be saved to an external server and exported as necessary.

WIRELESS SOLUTIONS

Softphones and desk phones can be paired and used with a single extension number, which leads to improved work efficiency.

VARIED TERMINAL LINE-UP

A wide range of terminals and handsets are available to meet various user needs.

SPECIFICATIONS

KX-NS1000			
Main CPU		650 MHz Dual Core	
Power input		100 V AC to 130 V AC: 0.95 A/200 V AC to 240 V AC: 0.6 A; 50 Hz/60 Hz	
Power Consumption (when fully mounted)		50 W (240 V: 132 VA, 200 V: 120 VA, 130 V: 104 VA, 100 V: 95 VA)	
External Backup Battery		External battery port is not supported; Support UPS: USB2.0: 1 port (Connector: Type A)	
Memory Backup Duration		7 years	
Dialling	Trunk	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling with Caller ID (FSK/DTMF) 1600 Ω Maximum	
	Extension	Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling with Caller ID (FSK/DTMF) SLC1 port supports PFT in combination with the LCOT1 port connected to an analogue trunk	
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 24 x 3-party conference call to 9 x 8-party conference call	
Music on Hold (MOH)		1 port (Level Control: -31.5 dB to +31.5 dB per 0.5 dB) MOH: Selectable Internal/External Music Source port	
External Paging		1 port (Volume Control: -15.5 dB to +15.5 dB per 0.5 dB)	
Serial Interface Port	RS-232C	1 (maximum 115.2 kbps)	
RJ45 Port	MNT Port	1 (for PC connection)	10BASE-T/100BASE-TX/1000BASE-T (Auto MDI/ MDI-X)
	LAN Port	1 (for LAN connection)	
	WAN Port	1 (for LAN connection)	
Extension Connection Cable	SLT	1-pair wire (T, R)	
Air-cooling Method		Fan	
Dimension		430 mm (W) x 88 mm (H) x 340 mm (D)	
Weight (when fully mounted)		Under 5.1 kg	

SYSTEM CAPACITY

MAXIMUM TRUNKS

THE PBX SUPPORTS THE FOLLOWING NUMBER OF TRUNKS.

TYPE	KX-NS1000 Stand-alone System	KX-NS1000 with 1 Legacy Gateway			
		KX-NCP500/1000, KX-NS1020	KX-TDE100, KX-TDA100/100D	KX-TDE200, KX-TDA200	KX-TDE600/620, KX-TDA600/620
Total Number of Trunks	**256 ch**	**256 ch**	**256 ch**	**256 ch**	**256 ch**
H.323	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]
SIP[*4]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]
BRI	8 ch	12 ch[*5] / 16 ch[*6]	96 ch[*7] / 112 ch[*8]	128 ch	160 ch
PRI23[*4]	23 ch	46 ch	92 ch	92 ch	115 ch
PRI30[*4]	30 ch	60 ch	120 ch	120 ch	150 ch
T1	N/A	48 ch	96 ch	96 ch	120 ch
E1[*4]	N/A	60 ch	120 ch	120 ch	150 ch
Analogue	2 lines	12 lines[*5] / 16 lines[*6]	96 lines[*7] / 112 lines[*8]	128 lines	160 lines

TYPE	KX-NS1000 with 2 Legacy Gateway				KX-NS1000 One-look Networking
	KX-NCP500/1000, KX-NS1020	KX-TDE100, KX-TDA100/100D	KX-TDE200, KX-TDA200	KX-TDE600/620, KX-TDA600/620	
Total Number of Trunks	**256 ch**	**256 ch**	**256 ch**	**256 ch**	**600 ch**
H.323	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	48 ch[*1] / 48 ch[*2] / 96 ch[*3]	96 ch[*1] / 96 ch[*2] / 128 ch[*3]
SIP[*4]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch[*1] / 256 ch[*2] / 160 ch[*3]	256 ch
BRI	24 ch[*5] / 32 ch[*6]	192 ch[*7] / 224 ch[*8]	256 ch	256 ch	600 ch
PRI23[*4]	92 ch	184 ch	184 ch	230 ch	600 ch
PRI30[*4]	120 ch	240 ch	240 ch	256 ch	600 ch
T1	96 ch	192 ch	192 ch	240 ch	600 ch
E1[*4]	120 ch	240 ch	240 ch	256 ch	600 ch
Analogue	24 lines[*5] / 32 lines[*6]	192 lines[*7] / 224 lines[*8]	256 lines	256 lines	600 lines

*1 When Standard Type is selected for System Capacity Selection in the Easy Setup Wizard. *2 When IP-Extension Type is selected for System Capacity Selection in the Easy Setup Wizard. *3 When System resources Type is selected for System Capacity Selection in the Easy Setup Wizard. *4 When using the trunk adaptor KX-NS8188/KX-NS8290, the total number including SIP, PRI, and E1 is 256 ch. *5 When connected with the KX-NCP500. *6 When connected with the KX-NCP1000. *7 Except KX-TDA100D. *8 Only KX-TDA100D.

MAXIMUM TERMINAL EQUIPMENT

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

TYPE		KX-NS1000 Stand-alone System	KX-NS1000 with 1 Legacy Gateway			
			KX-NCP500/1000, KX-NS1020	KX-TDE100, KX-TDA100/100D	KX-TDE200, KX-TDA200	KX-TDE600/620, KX-TDA600/620
Telephone		**640**	**640**	**640**	**640**	**640**
SLT		2	36	96 ch[*1] / 128 ch[*2]	128	240
KX-DT300/KX-T7600 Series DPT		N/A	36	96[*1]	128	160
KX-T7560/KX-T7565DPT		N/A	36	96[*1]	128	128
Other DPT		N/A	10	32[*1]	128	160
APT		N/A	4	24[*1]	64	80
IP-PT[*3]		256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]
SIP		640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]
-	SIP Phone[*7]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]
-	S-PS	255	255	255	255	255
DSS Console		N/A	8	8	8	64
CS		64	64	64	64	64
PT-interface CS (2-channel)		N/A	11	32[*1] / 26[*2]	32	32
PT-interface CS (8-channel)[*8]		N/A	5	16[*1] / 13[*2]	16	16
IP-CS		64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)
SIP-CS		64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)
PS		512	512	512	512	512
Voice Processing System (VPS)		N/A	2	2	2	2
Doorphone		1	17	17	17	17
Door Opener		1	17[*8]	17[*8]	17[*8]	17[*8]
External Sensor		1	17	17	17	17
External Relay		N/A	17[*8]	17[*8]	17[*8]	17[*8]

TYPE		KX-NS1000 with 2 Legacy Gateway				KX-NS1000 One-look Networking
		KX-NCP500/1000, KX-NS1020	KX-TDE100, KX-TDA100/100D	KX-TDE200, KX-TDA200	KX-TDE600/620, KX-TDA600/620	
Telephone		**640**	**640**	**640**	**640**	**1000**
SLT		72	192 ch[*1] / 256 ch[*2]	256	480	1000
KX-DT300/KX-T7600 Series DPT		72	192[*1]	256	320	512
KX-T7560/KX-T7565DPT		72	192[*1]	256	256	512
Other DPT		20	64[*1]	256	320	512
APT		8	48[*1]	128	160	336
IP-PT[*3]		256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	256[*4] / 640[*5] / 256[*6]	1000
SIP		640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	1000
-	SIP Phone[*7]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	640[*4] / 256[*5] / 384[*6]	1000
-	S-PS	255	255	255	255	255
DSS Console		16	16	16	64	64
CS		64	64	64	64	128
PT-interface CS (2-channel)		22	64[*1] / 52[*2]	64	64	128
PT-interface CS (8-channel)[*8]		10	32[*1] / 26[*2]	32	32	64
IP-CS		64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	64 (16CSs x 4 Air-sync Group)	128
SIP-CS		64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	64 (32CSs x 2 Air-sync Group)	128
PS		512	512	512	512	512
Voice Processing System (VPS)		4	4	4	4	8
Doorphone		33	33	33	33	64
Door Opener		33[*8]	33[*8]	33[*8]	33[*8]	64
External Sensor		33	33	33	33	64
External Relay		33[*8]	33[*8]	33[*8]	33[*8]	17[*8]

*1 Except KX-TDA100D *2 Only KX-TDA100D *3 KX-NT500 series, and KX-NT265 (software version 2.00 or later only). *4 When Standard Type is selected for System Capacity Selection in the Easy Setup Wizard. *5 When IP-Extension Type is selected for System Capacity Selection in the Easy Setup Wizard *6 When System resources Type is selected for System Capacity Selection in the Easy Setup Wizard *7 KX-UT Series, KX-NT700 and third party SIP phones (SIP hardphones/SIP softphones). *8 The DOORPHONE card of the KX-NS1000 can serve as a door opener or as an external relay depending on how it is programmed. Note: The numbers in the tables do not include Digital Extra Device Port (Digital XDP) connection.

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 – 32 parties per conference 72 parties total per KX-NS1000 PBX 32 parties total per legacy gateway
	COS	512
	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
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port
	Number of Characters of Name	20
	Printing message	8
	Queuing Time Table	128
	Ring Tone Pattern Plan	8
	Simultaneous Programmers	One manager programmer + 63 personal programmers / 64 personal programmers
	SMDR Call Storage	1000 calls
	Special Carrier Access Code	16 digits, 100 entries
	Tenant	32 / 128[*1]
	Time Service Holiday	24
	Verification Code	4 digits, 1000 entries
	Verification Code Personal Identification Number (PIN)	10 digits, 1000 entries
Dialing	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 or 32 digits, 300 entries/tenant[*1]
	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	256
	Call Pickup Group	96
	Idle Extension Hunting Group	128 (16 extensions/group)
	Incoming Call Distribution Group	128 (128 extensions/group)
	Paging Group	96
	PS Ring Group	32
	Trunk Group	96
	UM Group	1 group per PBX
	VM (DPT) Group	8 groups x 12 ports (24 channels)
	VM (DTMF) Group	8 groups x 32 channels
	P2P Group	256
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	48 entries
	Leading Number Table	16 digits, 1000 entries
	Leading Number Exception Table	16 digits, 200 entries
	ARS Carrier	128
	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. / 5000 records/system
	Outgoing Call Log—PS	100 records/extn. / 2560 records/system
	Incoming Call Log—PT	100 records/extn. / 10,000 records/system
	Incoming Call Log—PS + Incoming Call Distribution Group	100 records/extn. or group / Total 5120 records/system
	Message Waiting—PS + Incoming Call Distribution Group	640
	Message Waiting—PT + SLT	1,000
Outgoing Message (OGM)	Outgoing Message (OGM)	64
	OGM Total Recording Time	Approx. 64 minutes
Hospitality and Charge Management Features	Billing items for guest rooms	4000 records/PBX
	Hotel Operator	4
	Charge Rate	7 digits including a decimal
	Charge Denomination	3 currency characters/symbols
Networking	One-look Networking	1 Master unit / 15 Slave units
	Stacking connection (Legacy Gateway)	8 (One-look Networking)
	E1 trunk/PRI adaptor	16
	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

*1 Only when System resources Type is selected in the Easy Setup Wizard. *2 The total number of administrator and user accounts combined cannot exceed 1512.

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