Panasonic
BUSINESS

Superior flexibility for changing work styles.
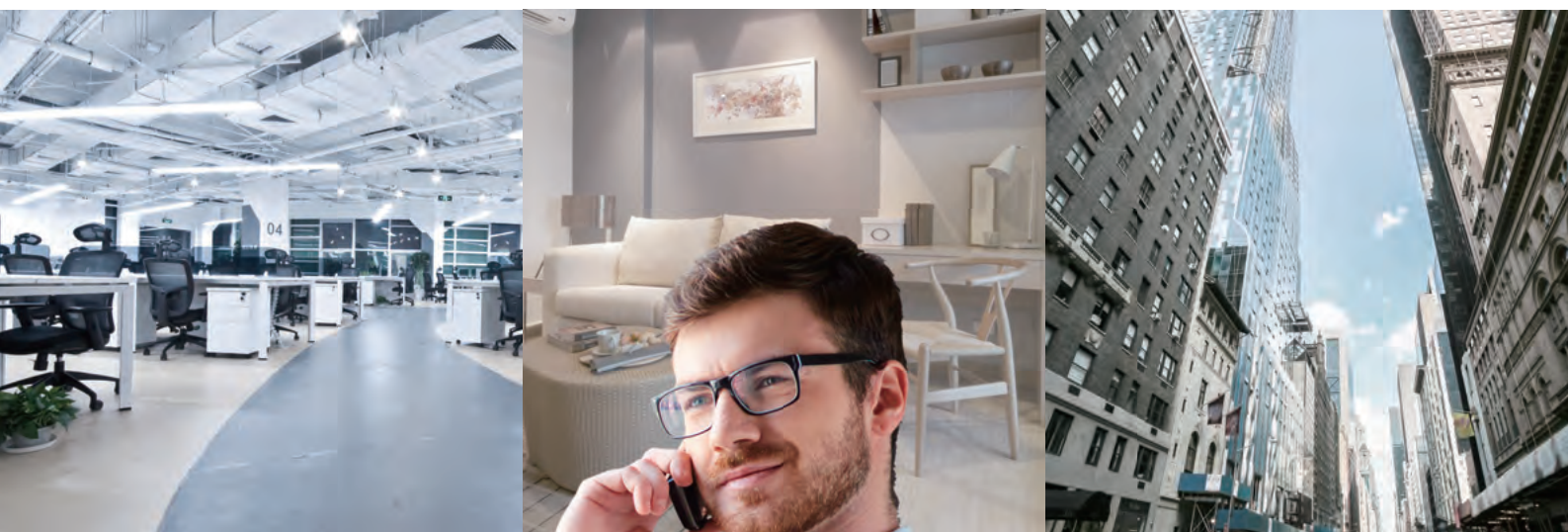
KX-NSX2000
KX-NSX1000

Companies require opportunities to make their operations more efficient. The business communication system needs to be flexible, innovative and competitive, while reducing operating costs and other expenses.

What is the KX-NSX?

Our communication styles continue to change over the years.

When only analogue communication was available, each phone line was assigned a specific telephone number. If the user moved and wanted to keep the same number, it was necessary to reroute the phone line.

When IP started to gain popularity, it became possible to assign a telephone number to a specific device. Simply by moving the device, users could use the same number in different locations.

Now, users expect that telephone numbers can be assigned to specific users, which can then be used from any device. As a result, users can conduct business communication not only inside the office, but even outside or at home, creating an opportunity to revolutionize their work style.

The Panasonic KX-NSX series delivers the next generation of communication systems to meet today's work style.

KX-NSX provides services integrated with the user's work style.
Users are classified into three groups to better facilitate their management.

Normal Users

For users who primarily work using a telephone.

Mobile Users

Users, such as sales representatives, who spend most of their time out of the office and require a smartphone or other mobile device to communicate with their customers.

Advanced Users

For users, such as supervisors of a call centre, who hold the authority to monitor correspondence with customers.

Flexible and Convenient Office Work

Whether you have employees that work in various locations around the office, are adding new employees, setting up a new office, starting a help desk or setting up employees to work from home - the KX-NSX can easily achieve your goals.

User Concept

Multi-Devices

Each user can assign a phone number to multiple devices such as their office phone and mobile phone, which enables a phone or mobile phone to be easily used as an office extension. Users can easily manage multiple devices spread over various locations using a single number.

Smart Desk

This function enables a number of users to share the same extension. Users apply their own profile with a service-in operation so they can only receive their personal calls and voicemail, etc. Once they have serviced-out, it becomes available for another employee. When an employee services in at a location, they are automatically serviced out at any previous location.

My Portal

Using the My Portal web-based user interface, each user can easily operate the telephony function settings and Unified Message customisation without knowing the PBX-specific feature number.

Scalability

Multi-Connection System

The KX-NSX is ideal for any company with scalability. Supports up to 2,000 users and provides connectability for up to 32 sites with the KX-NS series for seamless communication. It can also save costs for making calls between offices with KX-NS networking as internal calls, and provides sharing of up to 128 tenants, unified messaging, an office directory, and much more.

Centralised Management

The KX-NSX enables companies spread out over multiple locations to perform remote management from a main site using IP networking. There is no need to have an administrator at every site, which enables low cost operations.

Reliability

Communication quality and reliability are extremely important. With our communication system, the communication service can be maintained even if problems occur with the system.

Reliable Backup System to Survive System Failures

1+1 Redundancy

With a primary unit and secondary unit installed, if a problem occurs with the working system on the primary unit, the backup system of the secondary unit is promoted to the working system and continues operations as KX-NSX master PBX.

Simplified Isolated Mode

If network trouble occurs with a multi-site connection, the KX-NS at each site can operate as a stand-alone system. The KX-NSX is resilient and enables communication to continue.

Remote Maintenance

A service engineer can remotely perform maintenance on the KX-NSX. The Panasonic cloud service enables the engineer to access your system securely, from anywhere, anytime - which allows for quick system recovery. KX-NSX maintenance is both flexible and efficient.

Mobility

Employees can quickly and reliably communicate with customers and other members when they are away from their desk or outside the office, which leads to improved customer satisfaction and work efficiency, at the same time.

DECT Wireless System

With a multi-zone wireless system, you can receive calls wherever you are on your premises. This reduces waiting times and enables customers to speak to the right person at the right time. You can also switch easily between desk phones and portable devices during conversations. Finally, DECT paging allows conversations to be shared among multiple participants.

Mobile Phone Integration

Mobile phones can be connected as office extensions and used with the same number as the office phone for easy management and customer contact. With UC Pro, presence management, text chat, and video call functions can be used to enhance your business work style.

Unified Communication and Applications

KX-NSX has UC Pro support, video communication functions, a built-in call centre function
(external CTI servers not required), partner application linking, and more. These functions make
business communication more efficient and enable users to utilise limited resources effectively.

Panasonic UC Pro

UC Pro supports multiple devices such as PCs and mobile
phones and provides collaborative functions, including
presence management, audio/text/video chat, and
synchronization with Outlook Calendar.
Mobile clients can communicate with an account that
is also registered to their PC, so they can take care of
business while out of the office.

Video Communication

The combination of the video IP phone KX-HDV430
and communication IP camera KX-NTV150 or IP
video doorphone KX-NTV160 enable easy video
communication.

Built-in Call Centre

Automatic Voice Guidance

By being notified of their position in a queue through voice guidance, callers can better decide whether to wait, leave a message, or hang up. This provides a favourable impression for your business and improves the satisfaction of the customers for the service they are receiving.

Monitoring Callers and Call History Report

The supervisor can monitor the live status of call centres to understand on-site problems and improve them. Call history can also be output as a report to understand problems or opportunities relating to customer service. Report data can be saved to an external server.

Auto Recording and Backing Up Data

The KX-NSX can be used to automatically record conversations with customers, which can be listened to by supervisors, saved to an external server, and used to understand problems or opportunities relating to customer service.

Standard Users

Standard users who often use PC's need to streamline work activities and communicate more efficiently. With the KX-NSX with UC Pro, they can control communications from the screen of their PC and use IM and presence management to quickly reach co-workers. They can also easily contact people when moving around the office by using a DECT wireless system.

Remote Users

Remote users who mainly use telecommunication, such as home office users, need to use their extension numbers at home. With the KX-NSX, they can use a software phone and Panasonic IP Proprietary Telephones as remote extensions.

What kind of communication fits with your company?

The type of communication in the workplace varies for each and every person.
Panasonic provides an appropriate solution for each of these different user types.

Reception/Operators

Receptionists and operators that receive customer queries need to streamline call handling with easy operations such as point-and-click call controls, and see who's calling and why. With the KX-NSX and proprietary telephone, they can check the status of members, easily route calls, and cover multiple offices.

Executives/Supervisors

Executives and supervisors need to control the office communications of all users using extensions, mobile phones or PCs. With the KX-NSX with UC Pro, they can perform UM, video calls, and one number management, etc.

Mobile Users

Mobile users that often work outside the office need to use any mobile phone as an extension of the office phone system with one number access, presence management, and more. UC Pro for the KX-NSX series is a business application that covers various business needs. Users can communicate in a suitable way anytime and anywhere.
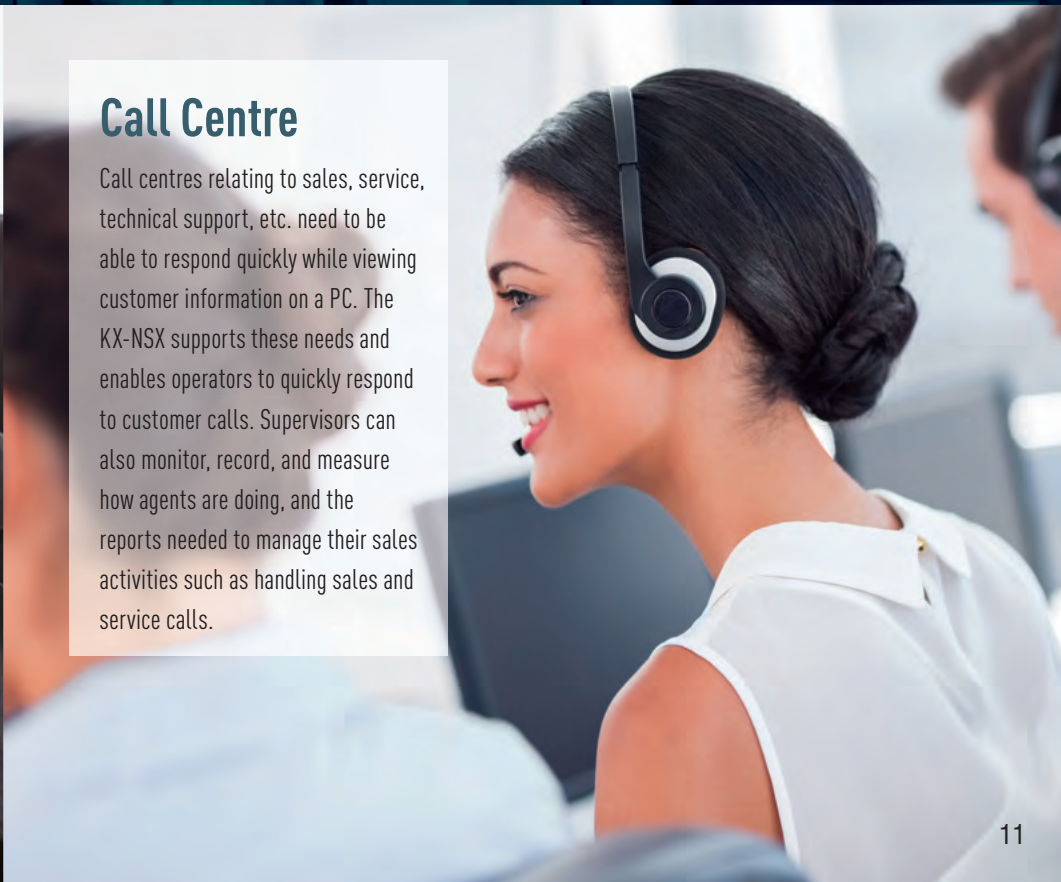
Call Centre

Call centres relating to sales, service, technical support, etc. need to be able to respond quickly while viewing customer information on a PC. The KX-NSX supports these needs and enables operators to quickly respond to customer calls. Supervisors can also monitor, record, and measure how agents are doing, and the reports needed to manage their sales activities such as handling sales and service calls.

Terminal Line-up

IP Proprietary Telephone/DECT Portable Station

The KX-NT500 series of fully functional IP telephones is designed for various businesses that require advanced communication.
A wide range of DECT handsets are also available to meet your business needs.

IP Proprietary Telephone

KX-NT560

- 4.4 inch Backlight LCD Display
- 4 x 8 Self Labelling, Flexible CO Buttons
- 2 Ethernet Port (1000 Base-T)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- Built-in Bluetooth for Headset
- EHS support
- Eco Mode
- Available in Black and White

KX-NT556/KX-NT553 with KX-NT505

- 6-Line (KX-NT556) or 3-Line (KX-NT553) Backlight LCD Display
- 12 x 3 (KX-NT556) or 12 x 2 (KX-NT553) Self-Labelling, Flexible CO Buttons
- 2 Ethernet Port (1000 Base-T)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- EHS support
- Eco Mode
- Available in Black and White
- Options: KX-NT505
  (Add-on 48-Key Module)

Photo: KX-NT556 with KX-NT505

KX-NT551

- 1-Line Backlight LCD Display
- 8 Flexible CO Buttons
- 2 Ethernet Port (1000 Base-T)
- Full Duplex Speakerphone
- Power-over-Ethernet (PoE)
- Eco Mode
- Available in Black and White

KX-NT511A/KX-NT511P

- 1-Line LCD Display
- 3 Flexible CO Buttons
- Power-over-Ethernet (PoE) (KX-NT511P only)
- 2 Ethernet Port (100 Base-TX)
- AC Adaptor Included (KX-NT511A only)
- Full Duplex Speakerphone
- Eco Mode
- Available in Black and White

DECT Portable Station

Tough Model
KX-TCA385

- IP65[*1] Compliant Dust Protection and Splash Resistance
- 1.8 inch Colour LCD
- 12 Flexible Keys
- Noise Reduction
- DECT Paging
- Vibration
- Built-in Bluetooth

  Dimensions (W x D x H) (mm):
  55.0 x 23.0 x 151.5
  Weight:
  150 g (Belt clip is included)

Slim & Light Model
KX-TCA285

- 12 Flexible Keys
- 1.8 inch Colour LCD
- Noise Reduction
- DECT Paging
- Vibration
- Built-in Bluetooth

  Dimensions (W x D x H) (mm):
  48.5 x 17.9 x 127.5
  Weight: 88 g

Standard Model
KX-TCA185

- 12 Flexible Keys
- 1.8 inch Colour LCD
- Noise Reduction
- DECT Paging
- Vibration

  Dimensions (W x D x H) (mm):
  48.2 x 25.4 x 146.3
  Weight: 115 g

* Dimensions and weight values do not include the charger.

*1 IP65 compliant: Protection against dust entering the handset, and protection against water spraying from any direction.

IP Phone

KX-HDV430 (Planned launch in 2016)

- Video Communication
- 4.3 inch Backlight LCD Display
- Colour Touch Panel
- 3 x 8 Self Labelling, Programmable Buttons
- 2 Ethernet Port (1000 Base-T)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- Built-in Bluetooth for Headset
- EHS support
- Available in Black and White

KX-HDV330

- 4.3 inch Backlight LCD Display
- Colour Touch Panel
- 3 x 8 Self Labelling, Programmable Buttons
- 2 Ethernet Port (1000 Base-T)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- Built-in Bluetooth for Headset
- EHS support
- Available in Black and White

KX-HDV230

- 2.3 inch Backlight LCD Display
- 5.1 inch Self Labelling Backlight LCD Display
- 2 x 12 Self Labelling, Programmable Buttons
- 2 Ethernet Port (1000 Base-T)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- EHS support
- Available in Black and White

KX-HDV130

- 2.3 inch Backlight LCD Display
- 2 Programmable Buttons
- 2 Ethernet Port (100 Base-TX)
- Power-over-Ethernet (PoE)
- Full Duplex Speakerphone
- Available in Black and White

KX-HDV100

- 2.3 inch LCD Display
- 2 Programmable Buttons
- 1 Ethernet Port (100 Base-TX)
- AC Adaptor Included
- Available in Black and White

IP Camera

Communication IP Camera
KX-NTV150

- Video Communication
- Dedicated Camera for the KX-NSX/KX-NS series
- Built-in Wi-Fi
- Power-over-Ethernet (PoE)/ AC Adaptor
- One Touch Calls
- Auto Dialling with Sensor

IP Video Doorphone
KX-NTV160

- Video Communication
- Dedicated Camera for the KX-NSX/KX-NS series
- IP43 Support
- Power-over-Ethernet (PoE) only
- One Touch Calls
- Auto Dialling with Sensor
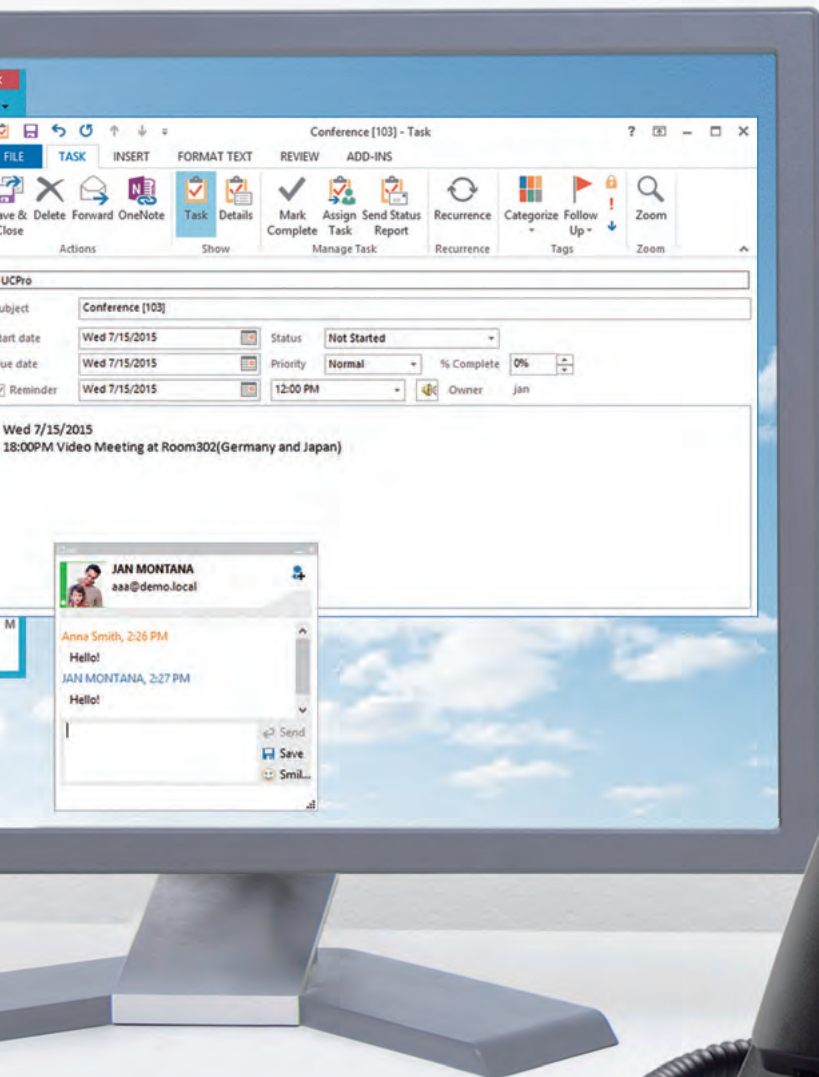
IP Phone/IP Camera (SIP)

The KX-HDV series of IP phones offer streamlined functions and high definition voice quality, and the KX-HDV430 can be linked to a KX-NTV series IP camera to directly view a video feed from the IP camera.

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PROFESSIONAL PABX CO.,LTD.

Panasonic®

Panasonic BUSINESS

KX-NSX2000
KX-NSX1000

PNMPR Software File Version 2.0

System Capacity

Maximum Trunks*1
The PBX supports the following number of trunks.

Type			KX-NSX2000			KX-NSX1000		
			Preinstalled	Stand-alone	Multi-connection	Preinstalled	Stand-alone	Multi-connection
Total Number of Trunks (Legacy+IP)			-	960	960	-	640	640
	IP		-	960	960	-	640	640
		SIP	-	960	960	-	640	640
		H.323	-	256	256	-	256	256
	Legacy		-	-	960	-	-	640
		Analogue (LCOT)	-	-	960	-	-	640
		BRI	-	-	960	-	-	640
		PRI23	-	-	960	-	-	640
		PRI30	-	-	960	-	-	640
		T1	-	-	960	-	-	640
		E1	-	-	960	-	-	640

Expansion Gateway System Capacity when Using Multi-site Networking

Type			Multi-site connection								
			KX-NS1000					KX-NS700			
			Stand-alone	With KX-TDA100D		With KX-TDA600/KX-TDA620, KX-TDE600/KX-TDE620		Stand-alone	With KX-NS720		
				1 unit	2 units	1 unit	2 units		1 unit	2 units	3 units
Total Number of Trunks (Legacy+IP)				256				102	138	174	210
	IP			256					64		
		SIP		256					64		
		H.323		48					32		
	Legacy		30	120	240	160	256	38	74	110	146
		Analogue (LCOT)	2	112	224	160	256	12	24	36	48
		BRI	8	112	224	160	256	16	32	48	64
		PRI23	23	92	184	115	230	23	46	69	92
		PRI30	30	120	240	150	256	30	60	90	120
		T1	-	96	192	120	240	-	-	-	-
		E1	-	120	240	150	256	30	60	90	120

Maximum Terminal Equipment
The following shows the number of each terminal equipment type supported by the PBX.

Type				KX-NSX2000			KX-NSX1000		
				Preinstalled*2	Stand-alone	Multi-connection	Preinstalled*2	Stand-alone	Multi-connection
User				100	2000	2000	70	1000	1000
Device for User (Extension)				100	2000	2000	70	1000	1000
Total Number of Devices Cannot Exceed the Total Number of Users	Wired Device			100	2000	2000	70	1000	1000
		IP Device		100	2000	2000	70	1000	1000
			IP-PT (KX-NT300/KX-NT500 Series)*3 KX-HDV Series KX-TGP600	100	2000	2000	70	1000	1000
			SIP phone (3rd Party)	-	2000	2000	-	1000	1000
			Communication IP Camera / IP Video Doorphone*4	-	128	128	-	128	128
		Legacy		-	-	2000	-	-	1000
			SLT	-	-	2000	-	-	1000
			DPT (DXDP*5)	-	-	1024 (2000)	-	-	512 (1000)
			APT	-	-	640	-	-	320
		DSS Console (KX-DT590/KX-DT390)		-	-	128	-	-	128
	PS			100	1000	1000	70	1000	1000
	Mobile Number in User Container			-	2000	2000	-	1000	1000
Add-on Key Module (KX-NT505)				-	128	128	-	64	64
Add-on Key Module (KX-NT303/KX-NT305)				-	2000	2000	-	1000	1000
CS				-	256	256	-	256	256
	IP-CS			-	256	256	-	256	256
	CS			-	-	256	-	-	256
Doorphone				-	-	124	-	-	124
Door Opener				-	-	124	-	-	124
External Sensor				-	-	124	-	-	124

Expansion Gateway System Capacity when Using Multi-site Networking

Type				Multi-site connection								
				KX-NS1000					KX-NS700			
				Stand-alone	With KX-TDA100D		With KX-TDA600/KX-TDA620, KX-TDE600/KX-TDE620		Stand-alone	With KX-NS720		
					1 unit	2 units	1 unit	2 units		1 unit	2 units	3 units
User				(Depends on the number of users on the KX-NSX side)					(Depends on the number of users on the KX-NSX side)			
Device for User (Extension)				(Depends on the number of users on the KX-NSX side)					(Depends on the number of users on the KX-NSX side)			
Total Number of Devices Cannot Exceed the Total Number of Users	Wired Device			640					166	198	230	262
		IP Device		640						128		
			IP-PT (KX-NT300/KX-NT500 Series)*3 KX-HDV Series KX-TGP600	640						128		
			SIP phone (3rd Party)	256						128		
			Communication IP Camera / IP Video Doorphone*4	128						128		
		Legacy		2	120	240	240	480	38	70	102	134
			SLT	2	120	240	240	480	36	68	100	132
			DPT (DXDP*5)	-	104	208	160	320	34	66	98	130
			APT	-	-	-	80	160	8	16	24	32
		DSS Console (KX-DT590/KX-DT390)		-	8	16	64	64	8	8	8	8
	PS			(Depends on the number of users on the KX-NSX side)					(Depends on the number of users on the KX-NSX side)			
	Mobile Number in User Container			(Depends on the number of users on the KX-NSX side)					(Depends on the number of users on the KX-NSX side)			
Add-on Key Module (KX-NT505)				64						8		
Add-on Key Module (KX-NT303/KX-NT305)				640						128		
CS				64					40	48	56	64
	IP-CS			64						32		
	CS			-	26	26	32	32	8	16	24	32
Doorphone				1	17	33	17	33	2	4	6	8
Door Opener				1	17	33	17	33	2	4	6	8
External Sensor				1	17	33	17	33	2	4	6	8

*1 The maximum trunks of an Expansion GW cannot exceed the capacity of the KX-NSX.
*2 Only normal users are preinstalled.
*3 The KX-NT300 series is not supported by the KX-NSX2000/KX-NSX1000. It is only supported by expansion gateways in a multi connection system.
*4 Communication IP cameras and IP video doorphones are not counted in the number of users.
*5 When Digital XDP is used, the maximum number depends on the gateway system.

Specifications

KX-NSX2000 / KX-NSX1000		
Main CPU		Intel ATOM E3845 (Quad core 1.91 GHz)
Power Input	Rated Voltage	AC 100-240 V
	Frequency	50/60 Hz
	Current/Power	0.95-0.6 A
Power Consumption (when fully mounted)		50 W
External Backup Battery		External battery port is not supported. Support UPS: USB2.0: 1 port (Connector: Type A)
Memory Backup Duration		7 years
Operating Environment	Temperature	0 °C to 40 °C
	Humidity	10 % to 90 % (non-condensing)
Conference Call Trunk		255 parties (85 x 3-party conference call, etc.)
RJ45 Port	MNT Port	Gigabit LAN Interface (for Maintenance)	
	LAN1 Port	Gigabit LAN Interface (for IP Trunk/IP Extension/Expansion GW)	10BASE-T/100BASE-TX/1000BASE-T (Auto MDI/MDI-X)
	LAN2 Port	Gigabit LAN Interface (for IP Trunk/IP Extension/Expansion GW)	
	LAN3 Port	Gigabit LAN Interface (for IP Trunk/IP Extension/Expansion GW)	
Air-cooling Method		Fan
Dimension		430 mm (W) x 88 mm (H) x 340 mm (D)
Weight (when fully mounted)		Under 5.0 kg

Available Devices and Services for Each User Grade

User Grade	Device				Service	
	Main	Sub	Wireless	Mobile Number	UM Mailbox	Auto 2-way Manager
Advanced User[*1]	KX-NT560, KX-NT556, KX-NT553, KX-NT551 KX-HDV430, KX-HDV330, KX-HDV230, KX-HDV130, KX-HDV100 KX-DT546[*4], KX-DT543[*4], KX-DT521[*4] KX-TCA385, KX-TCA285, KX-TCA185 KX-T7700 series[*4][*5] IP-Softphone	KX-NT560, KX-NT556, KX-NT553, KX-NT551 KX-HDV430, KX-HDV330, KX-HDV230, KX-HDV130, KX-HDV100 KX-DT546[*4], KX-DT543[*4], KX-DT521[*4] IP-Softphone	KX-TCA385, KX-TCA285, KX-TCA185	Mobile number and other public phone number	Yes	Yes
Mobile User[*2]						-
Normal User[*3]		-		-		

*1 Requires Normal User AK, Mobile User AK and Advanced User AK.
*2 Requires Normal User AK and Mobile User AK.
*3 Requires Normal User AK.
*4 Requires Expantion Gateway.
*5 If assigned as a main device, sub device and wireless device is unavailable.

Option List for KX-NSX2000/KX-NSX1000

Activation Keys

Component			Model No.
Main[*1]	Activate KX-NSX2000 main features (only for the KX-NSX2000)		KX-NSX201
	Activate KX-NSX1000 main features (only for the KX-NSX1000)		KX-NSX101
Maintenance	Activate maintenance features (Capturing Packet Trace/Expanding system logs/Software upgrade) Not necessary for 1st year, required from 2nd year		KX-NSX2201
Remote Maintenance	Activate remote maintenance features		KX-NSX6211
IP Trunk	IP Trunks (H.323/SIP)	1 ch	KX-NSXT001
		10 ch	KX-NSXT010
		50 ch	KX-NSXT050
		100 ch	KX-NSXT100
User Concept	Normal User	1 user	KX-NSUN001
		10 users	KX-NSUN010
		50 users	KX-NSUN050
		100 users	KX-NSUN100
		500 users	KX-NSUN500
	Mobile User	1 user	KX-NSUM001
		10 users	KX-NSUM010
		50 users	KX-NSUM050
		100 users	KX-NSUM100
		500 users	KX-NSUM500
	Advanced User	1 user	KX-NSUA001
		10 users	KX-NSUA010
		50 users	KX-NSUA050
		100 users	KX-NSUA100
		500 users	KX-NSUA500
General SIP Phones	3rd party SIP-Extension	1 ch	KX-NSXS001
		10 ch	KX-NSXS010
		50 ch	KX-NSXS050
		100 ch	KX-NSXS100
		500 ch	KX-NSXS500
Panasonic Doorphone/ IP Camera	Communication IP Camera/ IP Video Doorphone	1 ch	KX-NSXN001
		10 ch	KX-NSXN010
IP-CS Channel Expansion	Channel Expansion (from 4 to 8 ch)	1 ch	KX-NSXE001
		10 ch	KX-NSXE010
		50 ch	KX-NSXE050
Optional Features	Unified Messaging	UM message backup	KX-NSXU003
		Two-way recording (manager control)	KX-NSXU004
	Call Centre	ACD report, announcement of waiting number for queuing	KX-NSXF002
		Announcement of waiting number for queuing	KX-NSXF021
		ACD report	KX-NSXF022
	Multiple CTI Connection		KX-NSXF004
	LDAP	LDAP connection	KX-NSXF005
	Expansion GW	Expansion GW connection for the KX-NSX2000/KX-NSX1000 (master unit)	KX-NSXF006
	Redundancy		KX-NSXF008

*1 Purchase required to activate the KX-NSX2000/KX-NSX1000.

Hardware

Component		Model No.
DSP	S (63 resources)	KX-NS0110
	M (127 resources)	KX-NS0111
	L (254 resources)	KX-NS0112
Storage Memory for VM Recording	S (Recording Time: 200 hours)	KX-NSX2135
	M (Recording Time: 400 hours)	KX-NSX2136
	L (Recording Time: 800 hours)	KX-NSX2137
	LL (Recording Time: 1,600 hours)	KX-NSX2138
Trunk Adaptor	E1	KX-NS8188
	PRI30	KX-NS8290CE
	PRI23	KX-NS8290
NSX Expansion Box	Pure IP-PBX	KX-NS1000**G
	Stacking Card for KX-TDE series	KX-NS0132**G

Option List for Expansion Gateways

Activation Keys

Component		Model No.	Expansion Gateway			
			KX-NS1000	With Legacy Gateway		KX-NS700
				KX-TDA100D	KX-TDE600/KX-TDE620, KX-TDA600/KX-TDA620	
For Multi-connection Use						
Expansion GW	Expansion GW connection for the KX-NS700/KX-NS1000 (NS unit)	KX-NSXF007	●	–	–	●
Networking	Router function	KX-NSN101	●	–	–	–

Hardware

Component		Model No.	Expansion Gateway			
			KX-NS1000	With Legacy Gateway		KX-NS700
				KX-TDA100D	KX-TDE600/KX-TDE620, KX-TDA600/KX-TDA620	
DSP	S (63 resources)	KX-NS0110	●	–	–	–
		KX-NS5110	–	–	–	●
	M (127 resources)	KX-NS0111	●	–	–	–
		KX-NS5111	–	–	–	●
	L (254 resources)	KX-NS0112	●	–	–	–
		KX-NS5112	–	–	–	●
Trunk	6-Port Analogue Trunk Card (LCOT6)	KX-NS5180	–	–	–	●
	2-Port BRI Card (BRI2)	KX-NS5282	–	–	–	●
	4-Port BRI Card (BRI4)	KX-NS5284	–	–	–	●
	PRI Card (PRI23)	KX-NS5290	–	–	–	●
	PRI30/E1 Card (PRI30/E1)	KX-NS5290CE	–	–	–	●
	Doorphone Interface Card (DPH2)	KX-NS5162	–	–	–	●
Extension	4-Port Super Hybrid Extension Card (DHLC4)	KX-NS5170	–	–	–	●
	8-Port Digital Extension Card (DLC8)	KX-NS5171	–	–	–	●
	16-Port Digital Extension Card (DLC16)	KX-NS5172	–	–	–	●
	8-Port Single Line Telephone Extension Card (MCSLC8)	KX-NS5173	–	–	–	●
	16-Port Single Line Telephone Extension Card (MCSLC16)	KX-NS5174	–	–	–	●
Free	Stacking Master Card for Legacy Gateway (STACK-M)	KX-NS0130	●	–	–	–
	2-Port Analogue Trunk/2-Port SLT Card (SLC2/LCOT2)	KX-NS0180	●	–	–	–
	4-Port BRI/2-Port SLT Card (SLC2/BRI4)	KX-NS0280	●	–	–	–
	PRI23/2-Port SLT Card (SLC2/PRI23)	KX-NS0290	●	–	–	–
FAX	FAX Interface Card (FAX)	KX-NS0106	●	–	–	–
Doorphone	Doorphone Interface Card (DOORPHONE)	KX-NS0161	●	–	–	–
Expansion Master	Expansion Master Card (EXP-M)	KX-NS7130	–	–	–	●
Legacy Gateway	Stacking Card for KX-TDE/KX-TDA Series (STACK-S (TDE))	KX-NS0132	–	●	●	–
Physical Trunk	8-Port Analogue Trunk Card (LCOT8)	KX-TDA0180	–	●	–	–
	16-Port Analogue Trunk Card (LCOT16)	KX-TDA0181	–	●	–	–
	8-Port DID Card (DID8)	KX-TDA0182	–	●	●	–
	4-Port Analogue Trunk Card (LCOT4)	KX-TDA0183	–	●	–	–
	8-Port E & M Trunk Card (E&M8)	KX-TDA0184	–	●	●	–
	T-1 Trunk Card (T1)	KX-TDA0187	–	●	●	–
	E-1 Trunk Card (E1)	KX-TDA0188	–	●	●	–
	4-Port BRI Card (BRI4)	KX-TDA0284	–	●	●	–
	8-Port BRI Card (BRI8)	KX-TDA0288	–	●	●	–
	PRI Card (PRI23)	KX-TDA0290	–	●	●	–
	8-Port Analogue Trunk Card with CID (CLCOT8)	KX-TDA1180	–	●	–	–
	8-Port Analogue Trunk Card with CID Daughter Card (CLCOT8E)	KX-TDA1186	–	●	–	–
	16-Port Analogue Trunk Card (ELCOT16)	KX-TDA6181	–	–	●	–
	16-Port Analogue Trunk Card w/o CID (ELCOT16)	KX-TDA6381	–	–	●	–
	16-Port Analogue Trunk Card with CID16 (ELCOT16)	KX-TDA6382	–	–	●	–
Physical Extension	4 Cell Station Interface Card (CSIF4)	KX-TDA0143	–	●	●	–
	8 Cell Station Interface Card (CSIF8)	KX-TDA0144	–	●	●	–
	8-Port Digital Hybrid Extension Card (DHLC8)	KX-TDA0170	–	●	●	–
	8-Port Digital Extension Card (DLC8)	KX-TDA0171	–	●	●	–
	16-Port Digital Extension Card (DLC16)	KX-TDA0172	–	●	●	–
	8-Port Single Line Telephone Extension Card (SLC8)	KX-TDA0173	–	●	●	–
	16-Port Single Line Telephone Extension Card with Caller ID (CSLC16)	KX-TDA0177	–	–	●	–
	16-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC16)	KX-TDA1176	–	●	–	–
	24-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC24)	KX-TDA1178	–	●	–	–
	16-Port Single Line Telephone Extension Card (ESLC16)	KX-TDA6174	–	–	●	–
	16-Port Single Line Telephone Extension with Message Lamp Card (EMSLC16)	KX-TDA6175	–	–	●	–
	24-Port Single Line Telephone Extension with Caller ID (ECSLC24)	KX-TDA6178	–	–	●	–
	24-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (EMSLC24)	KX-TDA6179	–	–	●	–
Others	4-Port Doorphone Card (DPH4)	KX-TDA0161	–	●	●	–
	2-Port Doorphone Card (German Type) (DPH2)	KX-TDA0162	–	●	●	–
	4-Port External Input/Output Card (EIO4)	KX-TDA0164	–	●	●	–
	16-Channel Echo Canceller Card (ECHO16)	KX-TDA0166	–	●	–	–
	Extension Caller ID Card (EXT-CID)	KX-TDA0168	–	●	●	–
	8-Port Caller ID/Pay Tone Card (CID/PAY8)	KX-TDA0189	–	●	●	–
	Optional 3-Slot Base Card (OPB3)	KX-TDA0190	–	●	●	–
	8-Port Caller ID Card (CID8)	KX-TDA0193	–	●	●	–
	16-Channel Echo Canceller Card (EECHO16)	KX-TDA6166	–	–	●	–
PSUs	L-Type Power Supply Unit (PSU-L)	KX-TDA0103	–	–	●	–
	M-Type Power Supply Unit (PSU-M)	KX-TDA0104	–	–	●	–

Compatible Panasonic Equipment

The KX-NSX2000/KX-NSX1000 supports the following equipment:

Cell Stations
• DECT 4 Channel IP Cell Station Unit (KX-NS0154)

Doorphones
• IP Video Doorphone (e.g., KX-NTV160)

Telephones
• Panasonic Proprietary Telephones
  - IP proprietary telephones (e.g., KX-NT500 series)
  - IP softphones (e.g., KX-NCS8100)
  - Portable stations (e.g., KX-TCA385, KX-TCA285)
• IP Phones (SIP)
  - KX-HDV series SIP phones (e.g., KX-HDV430, KX-HDV330, KX-HDV230)
  - SIP cordless phones (e.g., KX-TGP600)
  - IP conferencing phones (e.g., KX-NT700)
  - Third party SIP phones (SIP hardphones/SIP softphones)
• Others
  - Communication IP Camera (e.g., KX-NTV150)

Adaptors
• E1 Trunk Adaptor (KX-NS8188)
• PRI Adaptor (KX-NS8290CE, KX-NS8290)

If an expansion gateway is connected to a KX-NSX2000/KX-NSX1000, the following equipment is also supported.

Cell Stations

DECT
• 2-Channel Cell Station Unit (KX-TDA0155) *Except the KX-NS1000

Telephones
• Panasonic Proprietary Telephones
  - IP proprietary telephones (KX-NT300 series)
  - Digital Proprietary Telephone (e.g., KX-DT300 series, KX-DT500 series) *Except the KX-NS1000
  - DSS Console (e.g., KX-DT390, KX-DT590) *Except the KX-NS1000
  - Analogue Proprietary Telephone (e.g., KX-T7700 series) *Except the KX-NS1000
• Other
  - Single line telephones

If a legacy gateway is connected to a KX-NS1000, the following equipment is also supported.

Cell Stations

DECT
• 2-Channel Cell Station Unit (KX-TDA0155)
• 8-Channel High-density Cell Station Unit (KX-TDA0158)

Telephones
• Panasonic Proprietary Telephones
  - Digital Proprietary Telephone (e.g., KX-DT300 series, KX-DT500 series)
  - Portable Station (e.g., KX-TD7600 series)
  - DSS Console (e.g., KX-DT390, KX-DT590)
  - Analogue Proprietary Telephone (e.g., KX-T7700 series)

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

System Feature Capacity

Table 1

Item		Capacity
System	Absent Message—Extension	1 x 16 characters
	Absent Message—System	8 x 16 characters
	Call Park Zone	System/100, 100 for each tenant
	Conference	3 – 32 parties per conference 256 parties total per KX-NSX series PBX
	COS	512
	DID/DDI Table	32 digits, 7,000 entries
	Extension number	1 – 5 digits (PS:1-4 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	256
	Ring Tone Pattern Plan	8
	Simultaneous Programmers (PT Programming)	• one manager programmer + 127 personal programmers • 128 personal programmers
	Simultaneous Programmers (Web Maintenance Console)	• one installer level account • 1,000/2,000 User (User) level accounts • 128 User (Administrator) level accounts
	SMDR Call Storage	160,000 calls
	Special Carrier Access Code	16 digits, 100 entries
	Tenant	128
	Time Service Holiday	24
	Verification Code	4 digits, 2,000 entries
	Verification Code Personal Identification Number (PIN)	10 digits, 2,000 entries
	Charge Record for HOTEL	40,000 calls
Dialling	Emergency Call	32 digits, 20 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, System 3,000 + 1,000/Tenant
	Redial	32 digits
	System Speed Dialling	33,000/System *System wide: 1,000 entries *Tenant wide: 32,000 entries Max for 1 tenant: 1,000 entries
	One-touch Dialling—PT	32 digits, 5,000 entries/system
	One-touch Dialling—PS	32 digits, 1,000 entries/system
Groups	Conference Group	48 (31 members/group for Conference Group Mode, 31 members/group for Broadcast Mode)
	User Group	512
	Call Pickup Group	200

Table 2

Item		Capacity
Groups	Idle Extension Hunting Group	256 (16 extensions/group)
	Incoming Call Distribution Group	256 (128 extensions/group)
	Paging Group	200
	PS Ring Group	32
	Trunk Group	128
	P2P Group	512
TRS/Barring	TRS/Barring Level	7
	TRS/Barring Denied Code	16 digits, 600 entries/level
	TRS/Barring Exception Code	16 digits, 600 entries/level
ARS	Routing Plan Table	240 entries
	Leading Number Table	16 digits, 5,000 entries
	Leading Number Exception Table	16 digits, 1,000 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	100 records/user 10,000 records/system
	Incoming Call Log	100 records/user 20,000 records/system
	Incoming Call Log—PS + Incoming Call Distribution Group	10,240 records/system
	Message Waiting—PS + Incoming Call Distribution Group	KX-NSX2000: 2,000 KX-NSX1000: 1,000
	Message Waiting—PT + SLT	KX-NSX2000: 2,000 KX-NSX1000: 1,000
Outgoing Message (OGM)	Outgoing Message (OGM)	128
	OGM Total Recording Time	Approx. 64 minutes
	OGM Port	128
Hospitality and Charge Management Features	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
Networking	Multi-Connection Networking	1 Main Unit 31 Expansion Gateway
	TIE Line Routing and Modification Table	32 entries
	Leading Number	3 digits
	PBX Code	7 digits
Unified Messaging	Number of Users (Number of General Mailboxes)	KX-NSX2000: 2,000 KX-NSX1000: 1,000
	Total Number of UM Mailboxes	KX-NSX2000: 2,608 KX-NSX1000: 1,608
	Tenant	128
	Class of Service	512

Table 3

Item		Capacity
Unified Messaging	UM Channel	128
	Fax Channel	31
	IMAP Channel	72
	UM Recording Time	1,600 hours
	Message Length	1–60 minutes/Unlimited
	Number of Simultaneously Usable 2way Rec (Number of Conference Rooms)	85
	Auto 2way Rec Manager	96
	UM System Manager	1/Tenant
	UM Message Manager	1/Tenant
	UM Service Group	384/Tenant
	Custom Service	200/Tenant
	Mailbox Group	40
	Mailbox Group Member	200
Message Resource	System Guidance	1,400
	Custom Service Menu	200 items/Tenant
	Company Greeting	32
	Mailbox Group List Voice Label	20
	System Caller ID Caller Name	1,200
System Greeting Recording Length	Custom Service Menu	60
	Company Name	10
	Company Greeting	45
	System Mailbox Group Voice Label	10
	System Caller Name	10
	Prompt Selection	30
	Hold Announce Menu	30
Mailbox Greeting Recording Length	Mailbox Owner	10
	Personal Greeting	45
	Interview Message	10
	Personal Group List	10
	Personal Caller-ID	10
	EMD List Member Name	10
Call Centre	Supervisor	32
	Auto 2way Rec Manager	96
	Number of Call log for ACD report	1,200,000
Web Maintenance Console Accounts	Users (User)	KX-NSX2000: 2,000 accounts*1 KX-NSX1000: 1,000 accounts
	Users (Administrator)	128 accounts
	Installer	1 account
	Password (all account types)	4 – 16 characters
ACD Report	Number of Call log for ACD report	KX-NSX2000: 1,200,000 KX-NSX1000: 600,000

*1 The total number of administrator and user accounts combined cannot exceed the maximum user accounts.

Feature List

1. Call Handling Features

Incoming Call Features
Incoming Trunk Call Features
• Direct In Line (DIL)
• Direct Inward Dialling (DID)/Direct Dialling In (DDI)
• Multiple Subscriber Number (MSN) Ringing Service
• Calling Line Identification (CLI) Distribution
• Intercept Routing
• Intercept Routing—No Destination
Internal Call Features
• Internal Call Block
Incoming Call Indication Features
• Ring Tone Pattern Selection
• Call Waiting

Receiving Group Features
Idle Extension Hunting
Incoming Call Distribution Group Features
• Group Call Distribution
• Queuing Feature
• Distribution Order
• VIP Call
• Overflow Feature
• Log-in/Log-out
• Supervisory Feature
• Supervisory Feature (ACD)

Call Forwarding (FWD)/Do Not Disturb (DND) Features
Call Forwarding (FWD)
Do Not Disturb (DND)
FWD/DND Button, Group FWD Button

Answering Features
Line Preference—Incoming
Call Pickup
Hands-free Answerback

Making Call Features
Predialling
Automatic Extension Release
Intercom Call
Trunk Call Features
• Emergency Call
• Account Code Entry
• Dial Type Selection
• Reverse Circuit
• Trunk Busy Out
• Pause Insertion
• Host PBX Access Code (Access Code to the Telephone Company from a Host PBX)
• Special Carrier Access Code
Seizing a Line Features
• Line Preference—Outgoing
• Trunk Access

Memory Dialling Features
One-touch Dialling
Last Number Redial
Speed Dialling—Personal/System
Speed Dialling—External (LDAP)
Quick Dialling
Hot Line

Toll Restriction (TRS)/Call Barring (Barring) Features
Toll Restriction (TRS)/Call Barring (Barring)
Budget Management
Extension Dial Lock
Dial Tone Transfer
Walking COS
Verification Code Entry

Automatic Route Selection (ARS) Features
Automatic Route Selection (ARS)

Primary Directory Number (PDN)/Secondary Directory Number (SDN) Features
Primary Directory Number (PDN)/Secondary Directory Number (SDN) Extension

Busy Line/Busy Party Features
Automatic Callback Busy (Camp-on)
Executive Busy Override
Call Monitor
Second Call Notification to Busy Extension
• Call Waiting Tone
• Off-hook Call Announcement (OHCA)
• Whisper OHCA

Conversation Features
Hands-free Operation
Off-hook Monitor
Mute
Headset Operation
Data Line Security
Flash/Recall/Terminate
External Feature Access (EFA)
Trunk Call Limitation
Calling Party Control (CPC) Signal Detection

Transferring Features
Call Transfer
SIP Refer Transfer

Holding Features
Call Hold
Call Park
Call Splitting
Music on Hold

Conference Features
Conference
Privacy Release

Conference Group Call Features
Conference Group Call

Direct Inward System Access (DISA) Features
Direct Inward System Access (DISA)
Automatic Fax Transfer

Paging Features
Paging
Trunk Answer From Any Station (TAFAS)

External Device Features
Doorphone Call
Door Open
External Sensor
External Relay Control
Communication IP Camera/IP Video Doorphone

Caller ID Features
Caller ID
Incoming Call Log

Message Features
Message Waiting
Absent Message

Proprietary Telephone (PT) Hardware Features
Fixed Buttons
Flexible Buttons
LED Indication
Display Information

Administrative Information Features
Record Log Features
• Station Message Detail Recording (SMDR)
• Syslog Record Management
Printing Message
Call Charge Services

Hospitality Features
Room Status Control
Call Billing for Guest Room

Extension Controlling Features
Extension Personal Identification Number (PIN)
Extension Feature Clear
Timed Reminder
Smart Desk Features
• Service-in Feature
• Service-out Feature

Audible Tone Features
Dial Tone
Confirmation Tone

Computer Telephony Integration (CTI) Features
Computer Telephony Integration (CTI)

Cellular Phone Features

Miscellaneous Features
Background Music (BGM)
Outgoing Message (OGM)

User Concept
User Container
• User Container Configuration
• Individual User Information Management of the Construction and Maintenance Personnel
• Editing User Settings
• Security (Password)
• Smart Desk Feature
• Linking with LDAP User Information
Call Control Feature
• Main Device/Device Common
• Sub-device
• DSS Console
• Wireless Device
• Public (Mobile Phone) Device
• UM (Mailbox)
• Various Logs and Reports
• CTI

2. Unified Messaging System

Unified Messaging System Administration
System Administration
• Custom Service Builder
• Default Mailbox Template
• Password Administration
• System Backup/Restore
• System Reports
• System Security

Fax Server

System and Subscriber Features
System Features
• Alternate Extension Group
• Auto Forwarding
• Automated Attendant (AA)
• Automatic Two-way Recording for Manager
• Broadcasting Messages
• Call Services
• Call Transfer to Outside
• Caller ID Call Routing
• Caller ID Screening
• Caller Name Announcement
• Class of Service (COS)
• Company Greeting
• Company Name
• Covering Extension
• Custom Service
• Dialling by Name
• Emergency Greeting
• Extension Group
• Fax Service
• Hold
• Holiday Service
• Hospitality Mode
• Intercept Routing to a Mailbox
• Intercom Paging
• Interview Service
• List All Names
• Logical Extension (All Calls Transfer to Mailbox)
• Message Reception Mode
• Message Waiting Notification—E-mail Device
• Message Waiting Notification—Lamp
• Message Waiting Notification—Telephone Device
• Multilingual Service
• No DTMF Input Operation
• On Hold Announcement Menu
• Operator Service
• PIN Call Routing
• Play System Prompt After Personal Greeting
• Port Service
• Remote Time Service Set
• Service Group
• Simplified Tutorial
• System Prompts
• Transfer Recall to a Mailbox
• Transfer to Mailbox
• Trunk Service (Universal Port)
• Voice Mail Service
Subscriber Features
• Auto Receipt
• Automatic Fax Delivery
• Automatic Login
• Autoplay New Message
• Bookmark
• Call-through Service
• Call Transfer Scenario
• Call Transfer Status
• Callback Number Entry
• Caller ID Callback
• Delete Message Confirmation
• Direct Service Access

• External Message Delivery Service
• Fax Cover Page
• Fax Driver
• Forwarding to a Mailbox
• Group Distribution Lists
• Incomplete Call Handling Service
• Live Call Screening (LCS)
• Mailbox
• Mailbox Capacity Warning
• Manager Service Switching
• Message Transfer
• Personal Custom Service
• Personal Greetings
• Private Message
• Recover Message
• Remote Absent Message
• Remote Call Forwarding Set
• Send to Fax Machine
• Subscriber Tutorial
• Timed Reminder Setting
• Toll Saver
• Two-way Record/Two-way Transfer
• Urgent Message
• Voice Mail (VM) Transfer Button
• Web Programming

E-mail Client Integration Features
Integration with Microsoft Outlook
IMAP Integration

3. Network Features

Public Network Features
SIP (Session Initiation Protocol) Trunk
SIP Server Failover
• Direct SIP Connection
Integrated Services Digital Network (ISDN) Service Features
• Calling/Connected Line Identification Presentation (CLIP/COLP)
• Advice of Charge (AOC)
• Call Forwarding (CF)—by ISDN (P-MP)
• Call Forwarding (CF)—by ISDN (P-P)
• Call Hold (HOLD)—by ISDN
• Call Transfer (CT)—by ISDN
• Three-party Conference (3PTY)—by ISDN
• Malicious Call Identification (MCID)
• Completion of Calls to Busy Subscriber (CCBS)
• ISDN Service Access by Keypad Protocol

Multi-connection Networking
Network Type Comparison
Multi-connection Networking Survivability
• Simplified Isolated Mode

Private Network Features
TIE Line Service
• Making a TIE Line Call
• TIE Line and Trunk Connection
• TIE Line Programming
• Common Extension Numbering for 2 PBXs
Voice over Internet Protocol (VoIP) Network
• Gateway Groups
• Common Extension Numbering for Multiple PBXs
• Call Distribution Port Group
ISDN Virtual Private Network (ISDN-VPN)

QSIG Standard Features
• Calling/Connected Line Identification Presentation (CLIP/COLP) and Calling/Connected Name Identification Presentation (CNIP/CONP)—by QSIG
• Call Forwarding (CF)—by QSIG
• Call Transfer (CT)—by QSIG
• Completion of Calls to Busy Subscriber (CCBS)—by QSIG

4. System Configuration and Administration Features

System Configuration—System
Class of Service (COS)
Group
Tenant Service
Time Service
Operator Features
Manager Features

System Configuration—Extensions
IP Proprietary Telephone (IP-PT)
SIP (Session Initiation Protocol) Extension
• Simple Remote Connection
• Panasonic SIP Phones (P-SIP)
Peer-to-Peer (P2P) Connection
Portable Station (PS) Features
• Portable Station (PS) Connection
• PS Ring Group
• PS Directory
• PS Feature Buttons
ISDN Extension Features
• ISDN Extension
IP-CS (KX-NS0154)

Legacy Device Connection
Stacking Connection
Trunk Adaptor Connection

E-mail Notification Features
E-mail Notification for Extension Users
E-mail Notification of System-level Events
E-mail Notification of Sensor Alarm
E-mail Notification for Manager

System Data Control
PC Programming
PT Programming
DSP Resource Usage
• DSP Resource Reservation
• DSP Resource Advisor
Automatic Setup
Dynamic Host Configuration Protocol (DHCP) Server
Flexible Numbering/Fixed Numbering
Floating Extension
Software Upgrading

Fault Recovery/Diagnostics
UPS (Uninterruptible Power Supply) Integration
Power Failure Transfer
Power Failure Restart
Local Alarm Information
Simple Network Management Protocol (SNMP)
System Monitor
Dynamic Host Configuration Protocol (DHCP) Assignment
PING Confirmation
System Monitoring

• Functions and maximum capacity vary depending on the KX-NSX2000/KX-NSX1000 software version.
• Some operations may vary depending on the type of telephone being used. Please consult a Panasonic sales company for details.
• Note that the types of activation keys are subject to change without notice.