

# Panasonic

Business Communications Server  
**KX-NS1000**



**DISCOVER A WORLD OF  
BENEFITS IN ONE BUSINESS  
COMMUNICATIONS SOLUTION.**

# An IP Platform to Deliver Business Communication

## INTRODUCING THE PANASONIC KX-NS1000

In the current era Business Communications Servers should provide solutions to real world Business requirements, such as simplifying and improving communications, lowering costs and improving productivity, while flexibly adapting to the way the organization works.

The NS1000 Network Communications Server by Panasonic is designed to deliver these solutions, integrating hardware and software components in a modular way, allowing you to tailor a communications system to your specific needs.

The NS1000 is built on SIP and IP technologies, with powerful built-in Unified Collaboration and Communication components including desktop tools, voice messaging and an interactive voice response system. Partnering with a comprehensive range of terminals, accessories and applications software, ensures that systems can adapt to meet all the communication requirements of your business to support revenue growth.

With best in class, high definition voice quality and on-demand capacity enhancements, the NS1000 is the core of a powerful VoIP communications solution offering flexibility, simplicity and productivity.

### Business Communications Server **KX-NS1000**



# Solutions

## Why choose the NS1000?

### Improve Customer Responsiveness

Integrated applications for call grouping and routing, ensuring the right person takes every call

### Enhance Productivity

'Presence' - Know who is available, and how best to contact them at any time

### Mobility

Wireless DECT systems and mobile phone integration means you can stay in touch, even when you're on the move

### Desktop Integration & Application Support

### Scalability

Direct support for up to 1,000 users in a full transparent network and for integrated Q-SIG networks for up to 8,000 users.

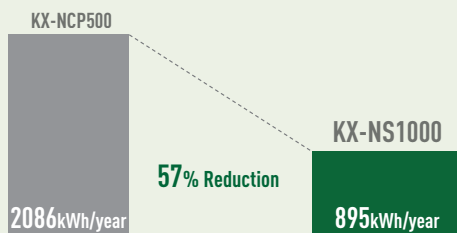
A powerful Computer Telephony Interface allows the NS1000 to work with many CRM tools, maximizing access to hard-earned customer contact data.



The KX-NS1000 system is an eco-conscious product helping reduce energy consumption.

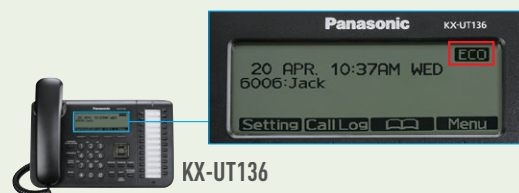
### Less power consumption

System power consumption is reduced by 57% (using the Eco Mode of the KX-UT136) in comparison to the KX-NCP500.



### Eco Mode

The KX-UT Series SIP phones save energy even during standby mode and while calling. By using the Eco Mode, power consumption can be reduced even further.



<Measurement environment >

\*Products: KX-NS1000 plus 90 terminals (KX-UT136), power source: AC adaptor  
KX-NCP500 plus 90 terminals (KX-NT346), power source: AC adaptor

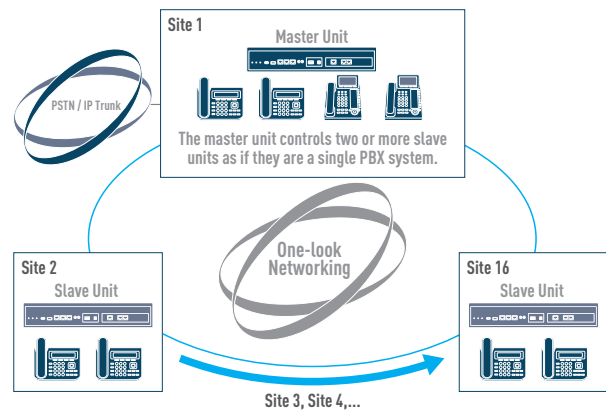
\*Measurement span: 5 years

\*Operating days: 240 days/year (running: 8 hours/day, waiting: 16 hours/day), holidays: 125 days/year

# IP Networking Flexibility and Survivability

## SIP BUSINESS ADVANTAGES

One-look Networking is a system where a single KX-NS1000 operates and provides PBX features even though two or more main units are networked. It is not necessary to provide additional servers. The system can be expanded easily via a web-based maintenance console. One-look Networking provides a maximum of 16 sites with the large capacity of KX-NS1000.



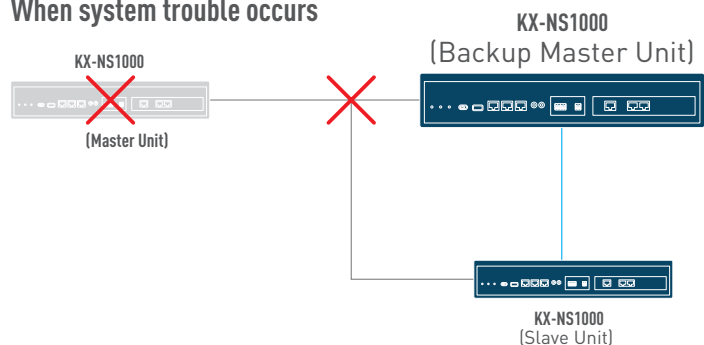
## NETWORKING

The NS1000 is a fully network aware server, with a variety of options for single and multi site expansion. Units can be combined to scale up to 1,000 direct users with full transparency for both users and administrators. (up to 8,000 users across a QSIG network).

With the NS1000 system, customers can manage stand-alone and networked systems connected via an IP network from any location. The system supports both SIP and H.323 based inter-networking in addition to the traditional ISDN QSIG connectivity. For multi-site organizations, this brings the benefit of lower cost branch-to-branch communication, either by leveraging existing corporate IP Wide-Area-Networks (WANs), or using Managed VPN services from network service providers.

Create virtual teams across multiple networked sites and share resources more efficiently, through key enhancements in features such as Call Distribution, Centralized messaging, Conferencing and Mobile Integration.

### When system trouble occurs





## MODULAR SOLUTIONS

Based on IP networking technologies, the NS1000 combines advanced telephony features with a scalable framework of applications that have been carefully chosen and optimized for a variety of business types, whether based on a single site or distributed globally. The NS1000 makes communications simple for office workers as well as mobile, remote and home based staff, in environments as diverse as call centres and distribution centres.

Built on open technologies, the NS1000 is developer friendly, offering CSTA, TAPI, and multiplexing interfaces, with SIP communications, producing an open development environment which encourages 3rd party applications development to further enhance capabilities.

This ultimately minimizes the additional investment of new software applications. In most cases your available application can be integrated with the NS1000.

## UNIFIED MESSAGING

The NS1000 gives users great flexibility for managing messaging services. Voice and fax messages can be received using the built in Unified Messaging system in a number of ways – as email attachments, through the NS1000 IMAP4 server, or using the Communication Assistant Outlook<sup>®</sup> Toolbar. This means users can listen to voice messages using their phone or PC, for maximum flexibility.

## COMMUNICATION ASSISTANT

Computer meets telephone: the Panasonic Communication Assistant productivity suite is a highly intuitive Unified Communications and collaboration (UCC) software solution for Microsoft Windows<sup>®</sup>, that brings together many features. Simple 'point and click' telephony, presence, availability, MS Outlook<sup>®</sup> integration, visual voice messaging, CRM database integration and much more are combined in a single application – enhancing and simplifying communications for business telephony users.

## HIGHLIGHTS:

- Easy to use Microsoft Windows<sup>®</sup> GUI offering access to many PBX features
- Team management and collaboration features
- Integrated presence and availability, with MS Outlook<sup>®</sup> calendar integration
- IP camera integration
- Drag and drop multi-party conferencing
- Enhanced task specific versions optimized for specialist work types



# IP Networking Expandable Capacity

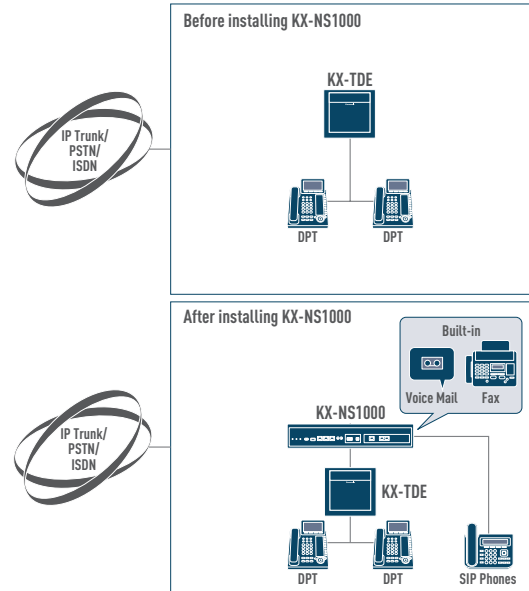
By connecting existing Panasonic PBX systems with the KX-NS1000, you can efficiently obtain expandability and flexibility for legacy lines and terminals and add IP capacity and functionality at a low cost.

## Migration

By connecting the KX-NS1000 to an existing Panasonic PBX<sup>\*1</sup>, you can expand IP lines and terminals and utilize the Unified Messaging features of the KX-NS1000<sup>\*2</sup>. This is also recommended for KX-NS1000 users that want to use legacy terminals and trunks for flexible system expansion.

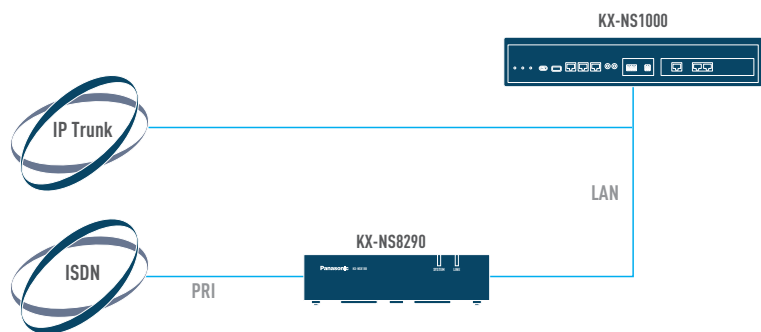
\*1 An existing PBX refers to a Panasonic KX-TDE series, KX-NCP series, or KX-TDA100/200/600/620.

\*2 You can connect a maximum of 2 existing PBXs for one KX-NS1000. A maximum of 8 existing PBXs can be connected for the entire One-look Network.



## Scalability

Customers that mainly use legacy trunks (E1/PRI) but want to prepare for future IP migration can use a trunk adaptor (KX-NS8290) for the KX-NS1000 to increase the maximum number of legacy lines available and to enable the use of both legacy and IP trunks. Since the adaptor can be connected to a maximum of 16 units, trunks can be flexibly expanded according to the customer's budget.





## APPLICATIONS

Partnering your NS1000 with applications from Panasonic Software Partners is the ideal way to tailor your communication system to meet your specific business needs, improving productivity by integrating your phone system with the business software systems you already use.

Partner applications offer many ways to simplify business workflows – by accessing both desk phones and mobiles using a single number; sharing CRM database information with the phone system; controlling calls from your Microsoft Windows® desktop and much more.

## MOBILITY (MOBILE PHONE & WIRELESS DECT)

The Multi-Cell DECT System is an integrated wireless mobility solution designed specifically for use with the Panasonic NS1000. This system provides automatic hand-over between installed cell stations – enhancing coverage and giving you true communication mobility even within large premises.

\* For full mobility Panasonic offers a range of handsets with full system features supported, from standard to compact to even an IP65 ruggedized handset. Please refer to our terminal brochure for more information

## MOBILE PHONE INTEGRATION

Now, there is no need for customers to have multiple contact numbers for users who also use a mobile phone. The NS1000 includes all that is required to integrate mobile phones and mobile devices with your office communications network, allowing cellular phones to be used just like office extensions – making and receiving calls, using PBX short dialing codes, and even managing ICD groups is possible from mobile devices.

For improved ease of use, mobile client applications are available to configure and manage PBX features from the cellular phone, ensuring quick and simple setup.



# Unified Communication

The KX-NS1000 gives you great flexibility for managing messaging services. Voice and fax messages can be received using the built-in Unified Messaging system in a number of ways; as e-mail attachments, through the KX-NS1000 IMAP4 server, or using the Communication Assistant. This means you can listen to voice messages using a phone or PC, for maximum flexibility.

## Built-in Voice Mail

The KX-NS1000's built-in voice mail can handle incoming calls, record messages and conversations, and manage mailboxes all from a cellular phone. Two channel two hour voice storage is preinstalled. With activation keys the number of channels can be expanded to 24 and the recording time can be expanded to 15 hours. The recording time can be further expanded to a maximum of 1000 hours by changing the storage memory.

Voice mail resources can also be shared across the network (using One-look Networking).

- Voice Mail/Mail Box Feature
- Custom Service
- Automated Attendant
- Interview Service
- Automatic Two-way Recording for Managers

## Built-in Fax Server

With its built-in fax server, the KX-NS1000 can receive, distribute, and send faxes. Received faxes can be saved in mail boxes and notify you via the message waiting lamp or e-mail, forwarded, printed, and downloaded.

## E-mail Integration

KX-NS1000 sends an e-mail to notify you when you have new fax and voice messages. Fax and voice messages can also be received as attachment files.

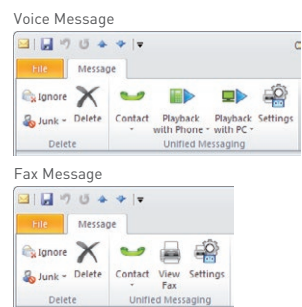
The KX-NS1000 also supports IMAP4 servers, so you can access the content of their mail boxes using a common e-mail client that supports the IMAP4 protocol, such as Microsoft Outlook.

## Simple Call Centre

The KX-NS1000 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 utilize limited resources to assist in improving customer service.

Furthermore, the solutions can be expanded to suit more sophisticated call centres in combination with Voice Mail functions, the Communication Assistant and third party CTI applications.

- Uniform Call Distribution (UCD)
- Priority Routing for VIP Calls
- 1:N Ringing (Group Ringing)/Delayed Ringing
- Intercept Routing/Busy on Busy
- Call Queue Monitoring
- Listen-in by Supervisor
- Call Monitor
- Busy Override





# Communication Assistant

As personal computers have become an essential business tool, Panasonic has developed a Network Communication Platform to seamlessly integrate with advanced desktop productivity applications for improved business efficiency.

The Panasonic Communication Assistant productivity software suite is a highly intuitive PC based application suite. It blends powerful point and click telephony together with screen based presence, integration with Microsoft Outlook<sup>®</sup>, CRM desktop tools, and a great variety of other features to simplify and enhance real-time communications for business telephony users. Designed for easy installation and maintenance, Communication Assistant can be deployed without the need of any additional 3rd party server, making it an ideal solution for small to medium size businesses.



## CA Basic



Point and click Unified Communications for desk based or remote workers. CA Basic helps you visually control all your communications from your PC.

## CA Pro



In addition to CA Basic the CA Pro provides users with real-time presence information. It allows visual control of all your communications from a PC and you stay informed of users availability in different locations.

## CA Supervisor



CA Supervisor is the perfect tool for team supervisors to monitor employees' call activities. It helps you visually manage all your group members telephony activities.

## CA Operator Console



A company receptionist can use the PC based Operator Console to quickly and easily handle large volumes of calls - easily handling company communications between customers and colleagues. Call parking and extension management features are available.

## VM Assistant



VM Assistant enables unified messaging and allows users to check their voicemail messages visually from a PC. It also allows you to forward messages to others as .wav files.

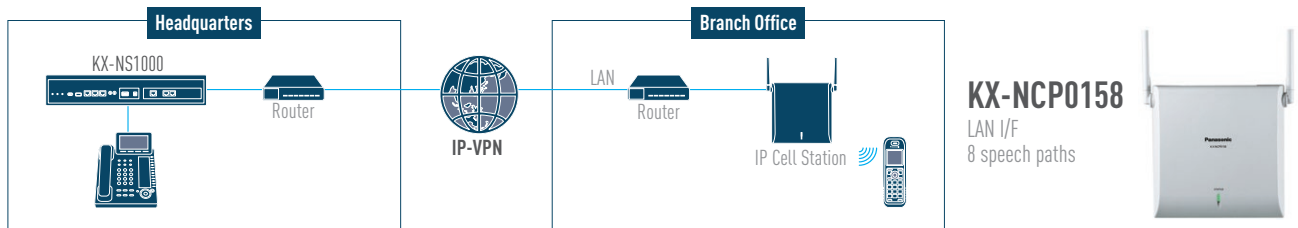
# Multi-Cell DECT Wireless System

Enjoy superb mobility no matter where you work, whether it is in an office, factory, warehouse, supermarket, or other large facility. The Panasonic Multi-Cell DECT System keeps you in constant touch with colleagues and key customers even when you have to leave your work area. Elegant, compact and convenient, these high-performance telephones put a host of advanced communication technology at your fingertips.



## IP Cell Station

IP Cell Stations allow you to connect to a KX-NS1000 main unit via LAN. If there is a LAN in your work place, you can connect to it directly and communicate with remote locations such as remote offices, increasing the efficiency of your business.



## Proprietary DECT Wireless Terminals



**KX-TCA385**

Rugged Model



**KX-TCA285**

Slim, Compact Model

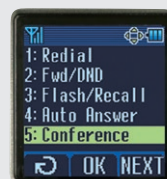


**KX-TCA185**

Standard Model

### Features that keep business moving:

- DECT 6.0 Technology
- 1.8-inch, 65,000-colour TFT Display
- Wideband Voice (G.722)
- Built-in Bluetooth® (KX-TCA285/385)
- Headset Jack (2.5mm plug)
- Vibrate Mode
- Full-Duplex Speakerphone
- Adjustable Ringtones
- IP65 Compliance (TCA385 only) \*1
- Noise Reduction Feature \*2



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

\*2 Background noise into the microphone is softened when set to ON.

\*2 Background noise into the microphone is softened and ear receiver volume is automatically turned up when in a loud environment.

# SIP DECT Wireless System

## Panasonic SIP Multi-Cell DECT Wireless Handsets

Panasonic is known worldwide as a premier manufacturer of communications solutions, including a broad range of flexible, cost-effective SIP endpoints. The Panasonic SIP Multi-Cell DECT series combines the benefits of DECT - an in-building radio technology that delivers high-quality, encrypted, mobile voice transmission - with the widely accepted SIP standard, paving the way to secure and affordable in-building mobile communications.



## SIP DECT Cell Station

With the KX-UDS124 SIP Cell station, only two Cell Stations are necessary for a site survey while using the LED colours to check the signal condition. Also, after installing each Cell Station, the loop back function of the KX-UDT131/121/111 can be used to check the sound and radio conditions, making it possible for a single person to check the entire service area.



### KX-UDS124

4-channel wideband Cell Station with Multi-cell capability

## SIP DECT Wireless Terminals

The KX-UDT111 is a standard size wireless phone ideal for the general office and any environment requiring enhanced mobility. The slim and light, pocket-sized KX-UDT121 model is perfect for most verticals including retail, hospitality and healthcare facilities where roaming is frequent. A concave shape prevents accidental dialing and protects keys when the handset is in a pocket and keys are rippled for easy access.

The KX-UDT131 is the perfect phone for harsh work environments. With its IP65 compliance (dust and water splash resistant) it is ideal for manufacturing, warehouse or factory applications.



### KX-UDT131

Rugged Model



### KX-UDT121

Slim, Compact Model



### KX-UDT111

Standard Model

## Features that keep business moving:

- DECT 6.0 Technology
- 1.8-inch, 65,000-colour TFT Display
- Wideband Voice (G.722)
- Built-in Bluetooth® (KX-UDT121/131)
- Headset Jack (2.5mm plug)
- Vibrate Mode
- 500-Entry Personal Phonebook
- Full-Duplex Speakerphone
- Adjustable Ringtones
- Maximum Register Handsets: 255
- Maximum Cell Stations per system: 128 (32 per Air Sync Group)
- IP65 Compliance (UDT131 only)

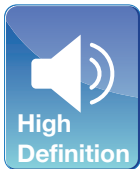
# Terminal Line-up

Various terminals are available to meet the needs of your office environment.



## The Panasonic SIP Phone UT Series

The latest offering in our line of feature-rich SIP endpoints, the new UT Series combines state-of-the-art telephony with business-friendly features. Choose from entry-level models with conferencing capability and a low power consumption mode to executive desk terminals with colour, touchscreen displays, wireless headset compatibility and integration with Panasonic network cameras.



### KX-UT670

- Executives and Vertical markets
- Highly intuitive style interface / 7-inch touch screen
- Programmable (JAVA, HTML, Adobe Flash)
- High quality wideband voice
- High quality HD video (H.264/720P)
- 2-Gigabit Ethernet ports with PoE



### KX-UT248

- General Office / Executive Users
- 4.4" Monochrome LCD
- Paper Free Labeling
- Full-Duplex Speakerphone with Wideband Audio and HD Voice
- Built-in Bluetooth®
- Electronic Hook Switch (EHS)
- 2 Gigabit Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption



### KX-UT133/136

- SIP Terminal for General Office Use
- 3 or 6 Line LCD Display
- 24 Programmable Feature Keys
- Wideband Audio and HD Voice
- Electronic Hook Switch (EHS)
- XML Application Interface
- 2 Ethernet ports, PoE



### KX-UT123

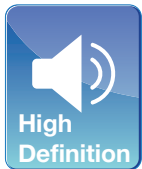
- SIP Terminal for General Office Use
- 3 Line Backlit LCD Display
- Wideband Audio and HD Voice
- XML Application Interface
- 2 Ethernet ports, PoE

# IP Proprietary Telephones



## KX-NT500 – The Perfect Team Player

The Panasonic KX-NT500 Series advanced IP desktop phones are designed for business users who require a range of feature-rich telephony devices to compliment their constantly changing business needs. Connected to the NS1000 Business Communication Server these IP terminals are extremely reliable and provide a wide range of features to support the right solution for all your business applications. Ergonomically designed with features and functions to enhance users daily productivity, they are ideal for many applications including contact centre agents or advanced desktop applications supporting a range of wired and Bluetooth® headsets (NT560 only).



### KX-NT560

- General Office / Executive Users
- 4.4" Monochrome LCD
- Paper Free Labeling
- Full-Duplex Speakerphone with Wideband Audio and HD Voice
- Built-in Bluetooth®
- Electronic Hook Switch (EHS)
- 2 Gigabit Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption



### KX-NT546

- IP Terminal for General Office Use
- 6-Line LCD Display
- Full-Duplex Speakerphone with Wideband Audio and HD Voice
- Electronic Hook Switch (EHS)
- 2 Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption



### KX-NT543

- IP Terminal for General Office Use
- 3-Line LCD Display
- Full-Duplex Speakerphone with Wideband Audio and HD Voice
- Electronic Hook Switch (EHS)
- 2 Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption



# KX-NS1000 System Capacity

## Maximum Trunks

The KX-NS1000 supports the following number of trunks.

Type	KX-NS1000 Stand-alone System	KX-NS1000 with 1 Legacy Gateway				KX-NS1000 One-look Networking
		KX-NCP500/1000	KX-TDE100/TDA100	KX-TDE200/TDA200	KX-TDE600/620, KX-TDA600/620	
Total Number of Trunks	256 ch	256 ch	256 ch	256 ch	256 ch	600 ch
H.323	48 ch	48 ch	48 ch	48 ch	48 ch	96 ch
SIP <sup>*1</sup>	256 ch	256 ch	256 ch	256 ch	256 ch	256 ch
PRI23 <sup>*1</sup>	23 ch	46 ch	92 ch	92 ch	115 ch	600 ch
T1	N/A	48 ch	96 ch	96 ch	120 ch	600 ch
Analogue	2 Lines	16 Lines	96 Lines	128 Lines	160 Lines	600 Lines

\*1 When using the trunk adaptor KX-NS8290, the total number including SIP, PRI, and E1 is 256 ch.

## Maximum Terminal Equipment

The following shows the number of each terminal equipment type supported by the KX-NS1000.

Type	KX-NS1000 Stand-alone System	KX-NS1000 with 1 Legacy Gateway				KX-NS1000 One-look Networking
		KX-NCP500/1000	KX-TDE100/TDA100	KX-TDE200/TDA200	KX-TDE600/620, KX-TDA600/620	
Telephone	640	640	640	640	640	1000
SLT	2	36	96	128	240	1000
KX-DT300/KX-T7600 Series DPT	N/A	40	128	256	256	1000
Other DPT	N/A	10	32	128	160	1000
APT	N/A	4	24	64	80	640
IP-PT <sup>*1</sup>	256*	256*	256*	256*	256*	1000
SIP Phone <sup>*2</sup>	640	640	640	640	640	1000
DSS Console	N/A	8	8	8	64	64
CS	64	64	64	64	64	128
PT-interface CS (2-channel)	N/A	11	32	32	32	128
PT-interface CS (8-channel) <sup>*3</sup>	N/A	5	16	16	16	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)	64 (16CSs x 4 Air-sync Group)	128
PS	512	512	512	512	512	512
Voice Processing System (VPS)	N/A	2	2	2	2	16
Doorphone	1	17	17	17	17	64
Door Opener	1	17	17	17	17	64
External Sensor	1	17	17	17	17	64
External Relay	N/A	16	16	16	16	64

\*1 KX-NT300 series and KX-NT265 (software version 2.00 or later only). \*2 KX-UT Series, KX-NT700 and third party SIP phones (SIP hardphones/SIP softphones).

\*3 One 8-channel PT-interface CS or IP-CS counts as 2 CSs for the total number of CSs.

Note: The numbers in the tables do not include Digital EXtra Device Port (Digital XDP) connection.

Contact your dealer for further information.

\*Future software release version 3 will support a max. number of 640

## Communication Assistant (CA) Specification \*Software version 4.0 or later required.

	CA Basic-Express	CA PRO	CA Operator Console	CA Supervisor
Maximum users (Without CA Server/With CA Server)	240/1022	240/1022	128/128	4/128
Activation key	Preinstalled for 1022 users	60-day free trial for 128 users	60-day free trial for 1 user	
View other extensions' presence from main menu	No	Yes	Yes	Yes
Call contact/Call history	10/10	1000/1000		
ICD group login/logout	No	Yes	Yes	No
Listen-in/Busy override/Take over	No	No	Yes	Yes
ICD group supervisor	No	No	No	Yes
Conference interface	No	Yes	Yes	Yes
Multi-site communication (Networking)	No	Yes	Yes	Yes
3rd-party CRM integration (TAPI/CSTA)	No	Yes	Yes	Yes
Microsoft Exchange Server integration	No	Yes	Yes	Yes
Microsoft Outlook toolbar	Yes <sup>*1</sup>	Yes	Yes	Yes
Thin client support	Yes	Yes	Yes	Yes

\*1 Call history and presence display in Outlook are not available for Basic-Express users.



The Panasonic Group strives to be a Green Innovation Company with a global perspective.

### Panasonic's Environmental Efforts

Panasonic aims to become the No.1 Green Innovation Company in the Electronics Industry. We believe we can integrate contribution to the environment with business growth by driving green innovation in all aspects of our business practices, and help people lead better and greener lives.

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- Other trademarks and trade names are those of their respective owners.

#### Important

- Safety Precaution: carefully read the operating instructions and installation manual before using these products.

- Some models will be available to limited countries.
- The images shown of products display and lamps are composite images.
- Weights and dimensions are approximate.
- Design and specification subject to change without notice.
- These products may be subject to export control regulations.

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