

System Capacity

Type		KX-TDE100	KX-TDE200
Maximum Trunks and Extensions	Total Number of Trunks	128	128
	Trunk (Physical Trunk Card)	120	128
	Trunk (Virtual Trunk Card*1)	32	32
	Total Number of Extensions	256	256
	Extension (Physical Extension Card)	160	256
	Extension (Virtual Extension Card*1)	128	128
Maximum Terminal Equipment	IP-Proprietary Telephone (IP-PT) and IP Softphone SIP Extension	64	64
	SIP Extension	128	128
	Telephone	256	256
	Single Line Telephone (SLT)	96	128
	KX-T7600 series Digital Proprietary Telephone (DPT)	128	256
	KX-T7560/KX-T7565 DPT	96	128
	Other DPT	32	128
	Analogue Proprietary Telephone (APT)	24	64
	IP-PT	160	160
	IP-PT *2 (supported by IP-EXT16 card)	96	128
	IP-PT *3 (supported by IPCMPR card)	64	64
	SIP Extension	128	128
	DSS Console	8	8
	Basic Cell Station (CS)	32	32
	High-Density CS	16	16
	Portable Station (PS)	128	128
	Voice Processing System (VPS)	2	2
	Doorphone	16	16
	Door Opener	16	16
	External Sensor	16	16
	External Relay	16	16

Note: For non peer-to-peer calls via the DSP card, calls cannot be made or received when all of the card's resources are being used.

*1 For Virtual Trunks and Extensions, a DSP card is required. Maximum 1 card per system.

*2 KX-NT136, KX-NT265, and NT300 series *3 KX-NT300 series and KX-NT265 (software version 2.00 or later only)



Option List

	Model	Description	
Main Processing Card	KX-TDE0101	IP Convergence Main Processing Card (IPCMPR)	
IPCMPR Option Cards	KX-TDE0110	16-Channel VoIP DSP Card (DSP16) - Built-in: 4 x IP-Trunks + 8 x IP-PT Extensions	
	KX-TDE0111	64-Channel VoIP DSP Card (DSP64) - Built-in: 16 x IP-Trunks + 32 x IP-PT Extensions	
	KX-TDA0196	Remote Card (RMT)	
Activation Key Cards	KX-NCS4104	4-Channel IP Trunk Activation Key (4 IP Trunk)	
	KX-NCS4208	8-Channel IP Softphone/IP Proprietary Telephone Activation Key (8 IP Softphone/IP PT)	
	KX-NCS4508	8-Channel IP Proprietary Telephone Activation Key (8 IP PT)	
	KX-NCS4716	16-Channel SIP Extension Activation Key (16 SIP Extension)	
	KX-NCS4910	Activation Key for Software Upgrade to Enhanced Version (Software Upgrade 01)	
	Physical Trunk Cards	KX-TDA0180	8-Port Analogue Trunk Card (LCOT8)
KX-TDA0181		16-Port Analogue Trunk Card (LCOT16)	
KX-TDA0182		8-Port DID Card (DID8)	
KX-TDA0183		4-Port Analogue Trunk Card (LCOT4)	
KX-TDA0184		8-Port E&M Trunk Card (E&M8)	
KX-TDA0188		E-1 Trunk Card (E1)	
KX-TDA0189		8-Port Caller ID/Pay Tone Card (CID/PAY8)	
KX-TDA0193		8-Port Caller ID Card (CID8)	
KX-TDA0284		4-Port BRI Card (BRI4)	
KX-TDA0288		8-Port BRI Card (BRI8)	
KX-TDA0290		PRI Card (PRI 30)	
KX-TDA0484		4-Channel VoIP Gateway Card (IP-GW4E)	
KX-TDA0490		16-Channel VoIP Gateway Card (IP-GW16)	
Physical Extension Cards		KX-TDA0143	4 Cell Station Interface Card (CSIF4)
		KX-TDA0144	8 Cell Station Interface Card (CSIF8)
		KX-TDA0170	8-Port Digital Hybrid Extension Card (DHLC8)
		KX-TDA0171	8-Port Digital Extension Card (DLC8)
		KX-TDA0172	16-Port Digital Extension Card (DLC16)
	KX-TDA0173	8-Port Single Line Telephone Extension Card (SLC8)	
	KX-TDA0174	16-Port Single Line Telephone Extension Card (SLC16)	
	KX-TDA0175	16-Port Single Line Telephone Extension Card with Message Lamp Card (MSLC16)	
	KX-TDA0470	16-Channel VoIP Extension Card (IP-EXT16)	
	Option Cards	KX-TDA0161	4-Port Doorphone Card (DPH4)
KX-TDA0162		2-Port Doorphone Card (German Type)(DPH2)	
KX-TDA0164		4-Port External Input/Output Card (EIO4)	
KX-TDA0166		16-Channel Echo Canceller Card (ECHO16)	
KX-TDA0168		Extension Caller ID Card (EXT-CID)	
KX-TDA0190		Optional 3-Slot Base Card (OPB3)	
KX-TDA0192		2-Channel Enhanced Simple Voice Message Card (ESVM2)	
KX-TDA0194		4-Channel Enhanced Simple Voice Message Card (ESVM4)	
Power Supply Units (PSUs)		KX-TDA0103	L-Type Power Supply Unit (PSU-L)
		KX-TDA0104	M-Type Power Supply Unit (PSU-M)
	KX-TDA0108	S-Type Power Supply Unit (PSU-S)	
	Cell Stations (CSs)	KX-TDA0141	2-Channel Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Potable Station
KX-TDA0142		4-Channel Cell Station Unit Using a CSIF Card for DECT Potable Station	
KX-TDA0158		8-Channel High-Density Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Potable Station	
Proprietary Equipment	KX-A228	S/M-type Back-up Battery Cable	
	KX-A229	L-type Back-up Battery Cable	
	KX-A258	Blank Slot Cover	
	KX-T7765	Doorphone	

Compatible Panasonic Proprietary Telephones

- The PBX supports the following telephones:
- IP Proprietary Telephones (e.g. KX-NT300 series)
- IP softphones (e.g. KX-NCS8100, NCS8101)
- Digital Proprietary Telephones (e.g., KX-T7600 series)
- Analogue Proprietary Telephones (e.g. KX-T7700 series)
- Portable Stations (e.g. KX-TCA355, KX-TCA256, KX-TCA155)
- DSS consoles (e.g. KX-T7640)
- Single Line Telephones (e.g. KX-T7710)

Incompatible Panasonic Proprietary Telephones

- The PBX does not support the following telephones:
- KX-T3080 series proprietary telephones and DSS consoles
- KX-T61600 series proprietary telephones and DSS consoles
- KX-T123200 series proprietary telephones and DSS consoles
- KX-TD7500 DECT portable station

Specifications

KX-TDE100/TDE200		
Control Bus	Original bus (16-bit, 8 MHz, 10 megabytes per second)	
Communication Bus	H.100 bus conformity (1024 time slots)	
Switching	Non-blocking	
Power Input	PSU-S	100 V AC to 130 V AC; 1.4 A 200 V AC to 240 V AC; 0.8 A 50 Hz/60 Hz
	PSU-M	100 V AC to 130 V AC; 2.5 A 200 V AC to 240 V AC; 1.4 A 50 Hz/60 Hz
	PSU-L	100 V AC to 130 V AC; 5.1 A 200 V AC to 240 V AC; 2.55 A 50 Hz/60 Hz
External Battery	+36 V DC (+12 V DC x 3, recommended maximum capacity is 28 Ah)	
Maximum Power Failure Tolerance	300 ms (without using backup batteries)	
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)	
Trunk Loop Limit	1600 Maximum	
Operating Environment	Temperature	0 C to 40 C
	Humidity	10 % to 90 % (non-condensing)
Conference Call Trunk	From 10 x 3-party conference call to 4 x 8-party conference call	
Music on Hold (MOH)	2 ports (Level Control: -11 dB to +11 dB in 1 dB steps)	
	MOH1: External Music Source port MOH2: Selectable Internal/ External Music Source port	
Paging	Internal	Level Control: -15 dB to +6 dB in 3 dB steps
	External	2 ports (Volume Control: -15 dB to +15 dB in 1 dB steps)
Serial Interface Port	RS-232C	1 (maximum 115.2 kbps)
RJ45 Port	MNT Port	1 (for PC connection)
	LAN Port	1 (for LAN connection)
Extension Connection Cable	SLT	1-pair wire (T, R)
	DPT	1-pair wire (D1, D2) or 2-pair wire (T, R, D1, D2)
	APT	2-pair wire (T, R, D1, D2)
	PT-interface CS (Basic)	1-pair wire (D1, D2)
Dimension	KX-TDE100	334 mm(W) x 390 mm(H) x 272 mm(D)
	KX-TDE200	430 mm(W) x 415 mm(H) x 276 mm(D)
Weight (when fully mounted)	KX-TDE100	Under 12 kg
	KX-TDE200	Under 16 kg

System Feature Capacity

	Item	KX-TDE100	KX-TDE200		Item	KX-TDE100	KX-TDE200	
System	Absent Message-Extension	1 x 16 characters		ARS	Routing Plan Table	16 entries		
	Absent Message-System	8 x 16 characters			Leading Number Table	16 digits, 1,000 entries		
	Call Park Zone	100			Leading Number Exception Table	16 digits, 200 entries		
	Conference	3-8 parties per conference (32 parties total)			ARS Carrier	10		
	COS	64			Itemised Billing Code	10 digits		
	DID/DDI Table	32 digits, 1,000 entries		Authorisation Code	10 digits			
	Extension Number	1-5 digits (1-4 digits for PSs, 2-4 digits for extensions which have a VM [DPT] mailbox)		Call Log and Message Waiting	Outgoing Call Log - PT	100 records/extn. 1,520 records/system		
	Extension Personal Identification Number (PIN)	10 digits, 1 entry/extension			Outgoing Call Log - PS	100 records/extn. 640 records/system		
	Host PBX Access Code	10 digits, 10 entries/trunk group			Incoming Call Log - PT	100 records/extn. 3,040 records/system		
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port			Incoming Call Log - PS + Incoming Call Distribution Group	100 records/extn. or group Total 2,048 records/system		
	Number of the Characters of Name	20			Message Waiting - PS + Incoming Call Distribution Group	256		
	Printing Message	8		Message Waiting - PT + SLT	512			
	Queuing Time Table	64		Voice Message	Outgoing Message (OGM)	64		
	Ring Tone Pattern Plan	8			OGM Total Recording Time	8 minutes		
	Simultaneous Programmers	• one system programmer + 63 personal programmers • one manager programmer + 63 personal programmers • 64 personal programmers			Built-in Simplified Voice Message (SVM)	125 messages		
	SMDR Call Storage	200 calls			Enhanced Simplified Voice Message (ESVM)	250 messages		
	Special Carrier Access Code	16 digits, 20 entries			SVM Total Recording Time	40, 60, or 120 minutes (depending on the recording quality)		
	Tenant	8		Hospitality and Charge Management Features	Billing Items for Guest Rooms	4,000 records/PBX		
	Time Service Holiday	24			Hotel Operator	4		
	Verification Code	4 digits, 1,000 entries			Charge Rate	7 digits including a decimal		
	Verification Code Personal Identification Number (PIN)	10 digits, 1,000 entries			Charge Denomination	3 currency characters/symbols		
	Dialling	Emergency Call	32 digits, 10 entries		Networking	TIE Line Routing and Modification Table	32 entries	
		Hot Line	32 digits			Leading Number	3 digits	
		Key Pad Protocol Dial (ISDN Service Access)	32 digits			PBX Code	7 digits	
		Personal Speed Dialling	32 digits, 100 entries/extn.			NDSS: Monitored PBXs	8	
		Quick Dialling	8 digits, 4,080 entries		NDSS: Registered Extensions for Monitor PBX	250		
		Redial	32 digits		CTI	PC Console	8	
		System Speed Dialling	32 digits, 1,000 entries/tenant			PC Phone	64 128	
	Groups	Broadcasting Group	8 (32 members/group)		Password	System Password for Installer	4 - 10 characters	
		Call Pickup Group	64			System Password for Administrator — for PC Programming	4 - 10 characters	
Idle Extension Hunting Group		64 (16 extensions/group)		System Password for User — for PC Programming		4 - 10 characters		
Incoming Call Distribution Group		128 (32 extensions/group)		System Password for Administrator — for PT Programming		4 - 10 digits		
Paging Group		32		System Password for User — for PT Programming		4 - 10 digits		
PS Ring Group		32		Manager Password		4 - 10 digits		
Trunk Group		64		Installer Level Programmer Code		4 - 16 characters		
VM (DPT) Group		2 groups x 12 ports (24 channels)		Administrator Level Programmer Code		4 - 16 characters		
VM (DTMF) Group	2 groups x 32 channels		User Level Programmer Code	0 - 16 characters				
TRS/ Barring	TRS/Barring Level	7		Programmer Code	Installer Level Programmer Code	4 - 16 characters		
	TRS/Barring Denied Code	16 digits, 100 entries/level			Administrator Level Programmer Code	4 - 16 characters		
	TRS/Barring Exception Code	16 digits, 100 entries/level			User Level Programmer Code	0 - 16 characters		

Feature List

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)
- Ringling 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
 - Outside Destinations in Incoming Call Distribution Group
 - Queuing Feature
 - VIP Call
 - Overflow Feature
 - Log-in/Log-out
 - Supervisory Feature
- Call Distribution Port Group

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
- KX-T7710 One touch Dialling
- Last Number Redial
- Speed Dialling - Personal/System
- Quick Dialling
- Hot Line

Primary Directory Number (PDN)/

Secondary Directory Number (SDN) Features

- 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

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

Automated Route Selection (ARS) Features

Conversation Features

- Hands-Free Operation
- Off-Hook Monitor
- Mute
- Headset Operation
- Data Line Security
- Flash/Recall/Terminate
- External Feature Access (EFA)
- Trunk Call Limitation
- Parallelled Telephone
- Calling Party Control (CPC) Signal Detection

Transferring Features

- Call Transfer

Holding Features

- Call Hold
- Call Park
- Call Splitting
- Music on Hold

Conference Features

- Conference
- Privacy Release

Paging Features

Broadcasting Features

Optional Device Features

- Doorphone Call
- Door Open
- Trunk Answer From Any Station (TAFAS)
- Background Music (BGM)
- Outgoing Message (OGM)
- Direct Inward System Access (DISA)
- External Sensor
- External Relay Control

Caller ID Features

- Caller ID
- Incoming Call Log

Message Features

- Message Waiting
- Absent Message

Proprietary Telephone (PT) Features

- Fixed Buttons
- Flexible Buttons
- LED Indication
- Display Information

Integrated Services Digital Network (ISDN) Service Features

- Calling/Connected Line Identification Presentation (CLIP/COLP)
- Advance 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 Extension
- ISDN Service Access by Keypad Protocol

E1 Line Service Features

Voice Message Features

- Built-in Simplified Voice Message (SVM)
- Simplified Voice Message card (SVM)
- Voice Mail Features
 - Voice Mail (VM) Group
 - Voice Mail DTMF Integration
 - Voice Mail DPT (Digital) Integration

Portable Station (PS) Features

- Portable Station (PS) Connection
- PS Ring Group
- PS Directory
- PS Feature Buttons
- Wireless XDP Parallel Mode
- Virtual PS

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
- Walking Extension Features
 - Walking Extension
 - Enhanced Walking Extension
- Timed Reminder

Audible Tone Features

- Dial Tone
- Confirmation Tone

Networking Features

- TIE Line Service
- Voice over Internet Protocol (VoIP) Network
- Virtual Private Network (VPN)
- QSIG Standard Features
 - Calling/Connected Line Identification

Presentation (CLIP/COLP) and

Calling/Connected Name Identification

Presentation (CNIP/CONP) - by QSIG365

- Call Forwarding (CF) - by QSIG
- Call Transfer (CT) - by QSIG
- Completion of Calls to Busy Subscriber (CCBS) - by QSIG
- QSIG Enhanced Features
- Network Direct Station Selection (NDSS)
- Centralised Voice Mail
- Network ICD Group
- PS Roaming by Network ICD Group

IP Telephone Features

- IP Proprietary Telephone (IP-PT)
- SIP (Session Initiation Protocol) Extension
- Peer-to-Peer Connection
- Self Labelling (KX-NT366 Only)

Computer Telephony Integration (CTI) Features

- Computer Telephony Integration (CTI)

PC Phone/PC Console

Cellular Phone Features

- Voice Message Clear

System Configuration and Administration Features

System Configuration - Hardware

Extension Port Configuration

System Configuration - Software

Class of Service (COS)

Group

Tenant Service

Time Service

Operator Features

Manager Features

System Data Control

PC Programming

PT Programming

Password Security

Quick Setup

Automatic Setup

Flexible Numbering/Fixed Numbering

Floating Extension

Software Upgrading

Fault Recovery/Diagnostics

Power Failure Transfer

Power Failure Restart

Local Alarm Information

Simple Network Management Protocol (SNMP) System Monitor

Dynamic Host Configuration Protocol (DHCP) Assignment

Packet Internet Groper (PING) Confirmation