



System Capacity

Maximum Trunks and Extensions

Type	KX-TDE100	KX-TDE200
Total Number of Trunks	128	128
Trunk (Physical Trunk Card)	120	128
Trunk (Virtual Trunk Card)	32	32
Total Number of Extensions	256	256
Extension (Physical Extension Card)	160	256
Extension (Virtual Extension Card)	128	128
IP-PT and IP Softphone	64	64
SIP Extension	128	128

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.

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)	
	KX-TDE0111	64-Channel VoIP DSP Card (DSP64)	
	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-TDA0187	T-1 Trunk Card (T1)	
	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-TDA0290CE/CJ	PRI Card (PRI 30)	
	KX-TDA0290	PRI Card (PRI 23)	
	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)	
	Other Physical 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 (EI04)	
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-TDA0191		4-Channel Message Card (MSG4)	
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)	Basic CSs	KX-TDA0141CE	2-Channel Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Potable Station
		KX-TDA0141	2-Channel Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for 2.4 GHz Potable Station
	High-Density CSs	KX-TDA0142CE	4-Channel Cell Station Unit Using a CSIF Card for DECT Potable Station
		KX-TDA0142	3-Channel Cell Station Unit Using a CSIF Card for 2.4 GHz Potable Station
		KX-TDA0151	2-Channel Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for 2.4 GHz Potable Station
Proprietary Equipment	KX-TDA0152	3-Channel Cell Station Unit Using a CSIF Card for 2.4 GHz Potable Station	
	KX-TDA0158CE	8-Channel High-Density Cell Station Unit Using a DHLC/DLC Card (PT-interface CS) for DECT Potable Station	
	KX-A228	S/M-type Back-up Battery Cable	
	KX-A229	L-type Back-up Battery Cable	
	KX-A258	Blank Slot Cover	
KX-T30865	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)
- 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-TD7690)
- 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-T30800 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

Maximum Terminal Equipment

Terminal Equipment Type	KX-TDE100	KX-TDE200
Telephone	256	256
SLT	96	128
KX-T7600 series DPT	128	256
KX-T7560/KX-T7565 DPT	96	128
Other DPT	32	128
APT	24	64
IP-PT	160	160
IP-PT *1 (supported by IP-EXT16 card)	96	128
IP-PT *2 (supported by IPCMPR card)	64	64
SIP Extension	128	128
DSS Console	8	8
Basic CS	32	32
High-Density CS	16	16
PS	128	128
Voice Processing System (VPS)	2	2
Doorphone	16	16
Door Opener	16	16
External Sensor	16	16
External Relay	16	16

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

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 Ω 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)
	PT-interface CS (High-Density)	4-pair wire (D1, D2)
DSS Console and Add-on Key Module	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)		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		
	Queueing Time Table	64		Outgoing Message (OGM)	64		
	Ring Tone Pattern Plan	8		OGM Total Recording Time	8 minutes		
	Simultaneous Programmers	<ul style="list-style-type: none"> • 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		SVM Total Recording Time	40, 60, or 120 minutes (depending on the recording quality)		
	Special Carrier Access Code	16 digits, 20 entries		Billing Items for Guest Rooms	4,000 records/PBX		
	Tenant	8		Hotel Operator	4		
	Time Service Holiday	24		Charge Rate	7 digits including a decimal		
	Verification Code	4 digits, 1,000 entries		Charge Denomination	3 currency characters/symbols		
Verification Code Personal Identification Number (PIN)	10 digits, 1,000 entries		TIE Line Routing and Modification Table	32 entries			
Dialling	Emergency Call	32 digits, 10 entries		Networking	Leading Number	3 digits	
	Hot Line	32 digits			PBX Code	7 digits	
	Key Pad Protocol Dial (ISDN Service Access)	32 digits			NDSS:Monitored PBXs	8	
	Personal Speed Dialling	32 digits, 100 entries/extn.			NDSS:Registered Extensions for Monitor PBX	250	
	Quick Dialling	8 digits, 4,080 entries		CTI	PC Console	8	
	Redial	32 digits			PC Phone	64	128
Groups	System Speed Dialling	32 digits, 1,000 entries/tenant		Password	System Password for Installer	4 - 10 characters	
	Broadcasting Group	8 (32 members/group)			System Password for Administrator – for PC Programming	4 - 10 characters	
	Call Pickup Group	64			System Password for User – for PC Programming	4 - 10 characters	
	Idle Extension Hunting Group	64 (16 extensions/group)			System Password for Administrator – for PT Programming	4 - 10 digits	
	Incoming Call Distribution Group	128 (32 extensions/group)			System Password for User – for PT Programming	4 - 10 digits	
	Paging Group	32			Manager Password	4 - 10 digits	
	PS Ring Group	32		Installer Level Programmer Code	4 - 16 characters		
	Trunk Group	64		Administrator Level Programmer Code	4 - 16 characters		
TRS/Barring	VM (DPT) Group	2 groups x 12 ports (24 channels)		Pro-grammer Code	User Level Programmer Code	0 - 16 characters	
	VM (DTMF) Group	2 groups x 32 channels					
	TRS/Barring Level	7					
	TRS/Barring Denied Code	16 digits, 100 entries/level					
	TRS/Barring Exception Code	16 digits, 100 entries/level					

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
 - 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

Automatic 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
- Paralleled 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)
- 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 Extension
- ISDN Service Access by Keypad Protocol

E1 Line Service Features

T1 Line Service Features

- Voice Message Features
- Built-in Simplified Voice Message (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

2. 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