

## 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
Maximum Terminal Equipment	Extension (Virtual Extension Card*1)	128	128
	IP-Proprietary Telephone (IP-PT) and IP Softphone	128	128
	SIP Extension	128	128
	Telephone	256	256
	Single Line Telephone (SLT)	96	128
	KX-DT300, KX-T7600 Digital Proprietary Telephones (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 Cell Station	16	16
	IP DECT Cell Station	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 Only 49 virtual trunk/extension card channels can be in use at any one time (except for peer-to-peer calls for IP extensions). 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
Power Supply Units (PSUs)	KX-TDA0103	L-type Power Supply Unit
	KX-TDA0104	M-type Power Supply Unit
	KX-TDA0108	S-type Power Supply Unit (PSU-S)
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-TDE0105	Memory Expansion Card (IPCMEC)
	KX-TDA0196	Remote Card
	Physical Trunk Cards	KX-TDA0180
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)
	Other Physical Cards	KX-TDA0161
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)	
Cell Stations	KX-TDA0141CE	2-Channel Cell Station Unit Using a DHLC/DLC Card for DECT Portable Station
	KX-TDA0142CE	4-Channel Cell Station Unit Using a CSIF Card for DECT Portable Station
	KX-TDA0158	8-Channel High-density Cell Station Unit Using a DHLC/DLC Card for DECT Portable Station
	KX-NCP0158	8-Channel IP Cell Station Unit (IP Network Connection)
	Doorphone	KX-T7765
Compatible Telephones	KX-NT300 Series	KX-NT366/346/343 Option KX-NT305/303 and NT307
	KX-DT300 Series	KX-DT346/343/333 Option KX-DT301/DT390/NT303 and NT307
	KX-T76 Series	KX-T7636/33/30/25/65/68 and Option T7640, T7603 and T7601
	KX-T77 Series	KX-T7735/30/50/20/10 and Option T7740

**Note:** TDE100 and TDE200 systems have built-in capabilities to enhance the system with additional IP extensions, IP trunks, applications and options. These can be unlocked using optionally available activation keys. For further details - please check list of activation keys available for this communication platform.

## TDE100 TDE200 Pure IP-PBX



## 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	70 % 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: -1 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	
	Queuing 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"> <li>• one system programmer + 63 personal programmers</li> <li>• one manager programmer + 63 personal programmers</li> <li>• 64 personal programmers</li> </ul>		Built-in Enhanced Simplified Voice Message (ESVM)*2		125 messages	
	SMDR Call Storage		200 calls / 10,000 calls with MEC		Optional Enhanced Simplified Voice Message (ESVM)*2		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	Pro-grammer Code				
	TRS/Barring Denied Code		16 digits, 100 entries/level					
	TRS/Barring Exception Code		16 digits, 100 entries/level					

\*1 Message card capacity. Not System capacity.  
\*2 Supports High Quality Music On Hold

## 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)
  - Calling Line Identification (CLI) Distribution
  - Intercept Routing
  - Intercept Routing-No Destination (Internal Call)
  - Internal Call Block - Incoming Call Indication
  - Ring Tone Pattern Selection
  - Call Waiting

#### Receiving Group Features

- Idle Extension Hunting
- Incoming Call Distribution (ICD) Group Features
  - Group Call Distribution
  - Outside Destinations in ICD 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

- Redialling
- 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

#### Paging Features

#### Broadcasting Features

### 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

#### 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

#### Hospitality Features

- Room Status Control
- Call Billing for Guest Room

### 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/CLDP)
- 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

#### 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

#### 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

#### IP Telephone Features

- IP Proprietary Telephone (IP-PT)
- SIP (Session Initiation Protocol) Extension
- Peer-to-Peer Connection
- Self Labelling (KX-NI366 Only)

#### Computer Telephony Integration (CTI)

- PC Phone/PC Console
- Cellular Phone Features
- Voice Message Clear

### Networking Features

- TIE Line Service
- Voice over Internet Protocol (VoIP) Network
- Virtual Private Network (VPN)
- OSIG Standard Features
  - Calling/Connected Line Identification Presentation (CLIP/CLDP) and Calling/Connected Name Identification Presentation (CNIP/CNPN) - by OSIG365
  - Call Forwarding (CF) - by OSIG
  - Call Transfer (CT) - by OSIG
  - Completion of Calls to Busy Subscriber (CCBS) - by OSIG
  - OSIG Enhanced Features
    - Network Direct Station Selection (NDSS)
    - Centralised Voice Mail
    - Network ICD Group
    - PS Roaming by Network ICD Group

### 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