

System Capacity

		KX-TDE600			
Type		Basic System	2 Shelf System	3 Shelf System	4 Shelf System (Max)
Maximum Trunks and Extensions	Total Number of Trunks	192	352	512	640
	Trunk (Physical Trunk Card)	160	320	480	640
	Trunk (Virtual Trunk Card*1)	64	64	64	64
	Total Number of Extensions	432	736	1008	1152
	Extension (Physical Extension Card)	304	608	880	1120
Maximum Terminal Equipment	Extension (Virtual Extension Card*1)	128	128	128	128
	IP-Proprietary Telephone (IP-PT) and IP Softphone	128	128	128	128
	SIP Extension	128	128	128	128
	Telephone				
	Single Line Telephone (SLT)	240	480	720	960
	KX-DT300, KX-T7600 Digital Proprietary Telephones (DPT)	256	512	640	640
	KX-T7560/KX-T7565 DPT	256	512	640	640
	Other DPT	128	256	384	512
	Analogue Proprietary Telephone (APT)	80	160	240	320
	IP-PT	224	384	544	672
	IP-PT *2 (supported by IP-EXT16 card)	160	320	480	640
	IP-PT *3 (supported by IPCMPR card)	128	128	128	128
	SIP Extension	128	128	128	128
	DSS Console	64	64	64	64
	Basic Cell Station (CS)	32	64	96	128
	High-Density Cell Station	16	32	48	64
	IP DECT Cell Station	16	16	16	16
	Portable Station (PS)	512	512	512	512
Voice Processing System (VPS)	8	8	8	8	
Doorphone	16	32	48	64	
Door Opener	16	32	48	64	
External Sensor	16	32	48	64	
External Relay	16	32	48	64	

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)

TDE600 Pure IP-PBX



Option List

	Model	Description	
Cabinet	KX-TDE600	Main Shelf	
	KX-TDE620	Expansion Shelf	
Power Supply Units (PSUs)	KX-TDA0103	L-Type Power Supply Unit	
	KX-TDA0104	M-Type Power Supply Unit	
Main Processing card	KX-TDE6101	Main Processing card (IPMPR)	
IPCMR Option Cards	KX-TDE0110	16-Channel VoIP DSP Card	
	KX-TDE0111	64-Channel VoIP DSP Card	
	KX-TDE0105	Memory Expansion Card (IPCMEC)	
	KX-TDA0196	Remote Card	
	KX-TDA0184	8-Port E & M Trunk Card	
Physical Trunk Cards	KX-TDA0187	T-1 Trunk Card (USA only)	
	KX-TDA0188	E-1 Trunk Card	
	KX-TDA0189	8-Port Caller ID/Pay Tone Card	
	KX-TDA0193	8-Port Caller ID Card	
	KX-TDA0284	4-Port BRI Card	
	KX-TDA0288	8-Port BRI Card	
	KX-TDA0290CE	PRI Card (PRI30)	
	KX-TDA0484	4-Channel VoIP Gateway Card	
	KX-TDA0490	16-Channel VoIP Gateway Card	
	KX-TDA6181	16-Port Analogue Trunk Card	
	Physical Extension Cards	KX-TDA0170	8-Port Digital Hybrid Extension Card
		KX-TDA0171	8-Port Digital Extension Card
		KX-TDA0172	16-Port Digital Extension Card
		KX-TDA0173	8-Port Single Line Telephone Extension Card
		KX-TDA0177	16-Port Single Line Telephone Extension Card
KX-TDA0470		16-Channel VoIP Extension Card	
KX-TDA6174		16-Port Single Line Telephone Extension Card	
KX-TDA6175		16-Port Single Line Telephone Extension with Message Lamp Card	
KX-TDA6178		24-Port Single Line Telephone Extension with Caller ID	
Other Physical Cards		KX-TDA0143	4 Cell Station Interface Card (CSIF4)
	KX-TDA0144	8 Cell Station Interface Card (CSIF8)	
	KX-TDA0161	4-Port Doorphone Card	
	KX-TDA0162	2-Port Doorphone Card (German Type)	
	KX-TDA0164	4-Port External Input/Output Card	
	KX-TDA0168	Extension Caller ID Card	
	KX-TDA0190	Optional 3-Slot Base Card	
	KX-TDA0191	4-Channel Message Card	
	KX-TDA0192	2-Channel Simplified Voice Message card	
	KX-TDA0194	4-Channel Simplified Voice Message card	
	KX-TDA6166	16-Channel Echo Canceller Card	
	Inter Connection	KX-TDA6110	Bus Master Card
		KX-TDA6111	Bus Master Expansion Card
	Additional Accessories	KX-TDA6201	Mounting Kit for expanding to a 3- or 4- shelf System
	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	Doorphone	
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: TDE600 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.

Specifications

KX-TDE600		
Control Bus	Original bus (16-bit, 8 MHz, 10 Megabytes per second)	
Communication Bus	H.100 bus conformity (1024 time slots)	
Switching	Blocking	
Power Input	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	Basic Shelf	430 mm(W) x 415 mm(H) x 270 mm(D)
	Expansion Shelf	430 mm(W) x 415 mm(H) x 270 mm(D)
Weight (when fully mounted)	Basic Shelf	Under 16 kg
	Expansion Shelf	Under 16 kg

System Feature Capacity

Item		KX-TDE600	Item		KX-TDE600	
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 *1	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	1000 calls / 20,000 calls with MEC		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	Networking	Charge Denomination	3 currency characters/symbols	
	Dialling	Emergency Call		32 digits, 10 entries	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	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	Pro-grammer Code	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			
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.

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

- 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

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/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

- 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-NT366 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)
- 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

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