

## System Capacity

### Maximum Trunk and Extension Cards

The following number of trunk and extension cards can be installed in the Hybrid IP-PBX for expansion.

Card Type	KX-TDA100D
Trunk Card	7*1
Extension Card	7
Total	7

\*1 One T1, E1, PRI30, PRI23, or IP-GW4 card counts as 2 cards.

### Maximum Terminal Equipment

The following number of items of terminal equipment can be supported by the PBX.

Terminal Equipment Type	Maximum Number
Telephone	176*1
SLT	128
KX-DT300/KX-T7600 series DPT	104
IP-PT	112
DSS console	8
CS	26
High-density CS	13
PS	128
Voice Processing System (VPS)	2
Doorphone	16
Door Opener	16
External Sensor	16
External Relay	16

\*1 When the PBX is equipped with 104 DPTs (Digital XDP), 48 IP-PTs, and 24 SLTs.



KX-TDA100D

## Option List

Category	Model No.	Description	
<b>DMPR Option Card</b>	KX-TDA0196	Remote Card (RMT)	
<b>Trunk Cards</b>	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 (PRI30)	
	KX-TDA0290	PRI Card (PRI23)	
	KX-TDA0484	4-Channel VoIP Gateway Card (IP-GW4E)	
	KX-TDA0490	16-Channel VoIP Gateway Card (IP-GW16)	
	KX-TDA1180	8-Port Analogue Trunk Base Card with Caller ID (CLCOT8)	
	KX-TDA1186	8-Port Analogue Trunk Daughter Card with Caller ID (CLCOT8E)	
<b>Extension Cards</b>	KX-TDA0143	4 Cell Station Interface Card (CSIF4)	
	KX-TDA0144	8 Cell Station Interface Card (CSIF8)	
	KX-TDA0171	8-Port Digital Extension Card (DLC8)	
	KX-TDA0172	16-Port Digital Extension Card (DLC16)	
	KX-TDA0470	16-Channel VoIP Extension Card (IP-EXT16)	
	KX-TDA1176	16-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC16)	
	KX-TDA1178	24-Port Single Line Telephone Extension with Caller ID and Message Lamp Card (MCSLC24)	
<b>Other Cards</b>	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-TDA0190	Optional 3-Slot Base Card (OPB3)	
	KX-TDA0191	4-Channel Message Card (MSG4)	
	KX-TDA0192	2-Channel Simplified Voice Message Card (ESVM2)	
	KX-TDA0194	4-Channel Simplified Voice Message Card (ESVM4)	
	KX-TDA0410	CTI Link Card (CTI-LINK)	
	<b>Optional SD Memory Card</b>	KX-TDA0920	SD Memory Card for Software Upgrade to Enhanced Version
<b>Cell Stations (CSs)</b>	<b>DECT</b>	KX-TDA0155	2-Channel Cell Station Unit Using a DLC Card (PT-interface CS) for DECT Portable Station
		KX-TDA0156	4-Channel Cell Station Unit Using a CSIF Card for DECT Portable Station
		KX-TDA0158	8-Channel High-density Cell Station Unit Using a DLC Card (PT-interface CS) for DECT Portable Station
<b>Proprietary Equipment</b>	KX-A228	Back-up Battery Cable	
	KX-A258	Blank Slot Cover	
	KX-T30865	Doorphone	
	KX-T7765	Doorphone	

## Specifications

KX-TDA100D	
<b>Control Bus:</b>	Original bus (16-bit, 8 MHz, 10 megabytes per second)
<b>Communication Bus:</b>	H.100 bus conformity (1024 time slots)
<b>Switching:</b>	Non-blocking
<b>Power Input:</b>	100 V AC to 130 V AC; 2.8 A/200 V AC to 240 V AC; 1.7 A; 50 Hz/60 Hz
<b>External Battery:</b>	+36 V DC (+12 V DC x 3, recommended maximum capacity is 28 Ah)
<b>Maximum Power Failure Tolerance:</b>	300 ms (without using backup batteries)
<b>Memory Backup Duration:</b>	7 years
<b>Dialling:</b>	<b>Trunk</b> Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling <b>Extension</b> Dial Pulse (DP) 10 pps, 20 pps Tone (DTMF) Dialling
<b>Mode Conversion:</b>	DP-DTMF, DTMF-DP
<b>Ring Frequency:</b>	20 Hz/25 Hz (selectable)
<b>Trunk Loop Limit:</b>	1600 Ω maximum
<b>Operating Environment:</b>	<b>Temperature</b> 0°C to 40°C <b>Humidity</b> 10 % to 90 % (non-condensing)
<b>Conference Call Trunk:</b>	From 10 x 3-party conference call to 4 x 8-party conference call
<b>Music on Hold (MOH):</b>	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
<b>Paging:</b>	<b>Internal</b> Level Control: -15 dB to +6 dB in 3 dB steps <b>External</b> 2 ports (Volume Control: -15 dB to +15 dB in 1 dB steps)
<b>Serial Interface Port:</b>	<b>RS-232C</b> 1 (maximum 115.2 kbps) <b>USB</b> 1
<b>Extension Connection Cable:</b>	SLT 1-pair wire (T, R) DPT 1-pair wire (D1, D2) or 2-pair wire (T, R, D1, D2) PT-interface CS 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)
<b>Dimension:</b>	334 mm (W) x 390 mm (H) x 270 mm (D)
<b>Weight (when fully mounted):</b>	Under 12 kg

### Compatible Panasonic Proprietary Telephones

The PBX supports the following telephones:

• Digital proprietary telephones (e.g., KX-DT300 series) • IP proprietary telephones (e.g., KX-NT300 series) • Portable stations (e.g., KX-TCA355, KX-TCA256) • DSS consoles (e.g., KX-DT390) • Single line telephones (e.g., KX-T7710)

### Incompatible Panasonic Proprietary Telephones

The PBX does not support the following telephones:

• KX-T7400 series digital proprietary telephones • KX-T7500 series digital proprietary telephones • Analogue proprietary telephones (e.g., KX-T7700 series) • KX-T30800 series proprietary telephones and DSS consoles

Some models will be available to limited Countries.

# System Feature Capacity

	Item	KX-TDA100D		Item	KX-TDA100D	
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 for Tenant	16 digits	
	Extension Number	1-5 digits (1-4 digits for PSs)		Authorisation Code for Trunk Group	10 digits	
	Extension Personal Identification Number (PIN)	10 digits, 1 entry/extension		Outgoing Call Log - PT	100 records/extn. 1,520 records/system	
	Host PBX Access Code	10 digits, 10 entries/trunk group		Outgoing Call Log - PS	100 records/extn. 640 records/system	
	Multiple Subscriber Number (MSN)	10 entries per ISDN-BRI port		Incoming Call Log - PT	100 records/extn. 3,040 records/system	
	Number of the Characters of Name	20	Incoming Call Log - PS + Incoming Call Distribution Group	100 records/extn. or group Total 2,048 records/system		
	Printing Message	8	Call Log and Message Waiting	Message Waiting - PS + Incoming Call Distribution Group	256	
	Queuing Time Table	64		Message Waiting - PT + SLT	512	
	Ring Tone Pattern Plan	8		Outgoing Message (OGM)	64	
	Simultaneous Programmers	• one system programmer + 63 personal programmers • one manager programmer + 63 personal programmers • 64 personal programmers		Voice Message	OGM Total Recording Time	MSG4 Card: 8 minutes; ESMV2/ESVM4 Card: 20 minutes (at High recording quality)
	SMDR Call Storage	2500 calls	Built-in Simplified Voice Message (SVM)		ESVM2/ESVM4 Card: 250 messages per card/block	
	Special Carrier Access Code	16 digits, 20 entries	SVM Total Recording Time		ESVM2/ESVM4 Card: 20, 60, or 120 minutes (depending on the recording quality)	
	Tenant	8	Billing items for guest rooms		2,500 records/PBX	
	Time Service Holiday	24	Hospitality and Charge Management Features	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		
Emergency Call	32 digits, 10 entries	TIE Line Routing and Modification Table		32 entries		
Dialling	Hot Line	32 digits	Networking	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	4080 entries (80: basic memory [4 digits], 4000: expansion memory [8 digits])		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	
	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 Level		7				
TRS/Barring	TRS/Barring Denied Code	16 digits, 100 entries/level				
	TRS/Barring Exception Code	16 digits, 100 entries/level				

## Features 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 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

- 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)
- Automatic Fax Transfer
- Built-in Simplified Voice Message (SVM)
- 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) - by ISDN
- ISDN Extension
- ISDN Service Access by Keypad Protocol

#### E1 Line Service Features

#### T1 Line Service Features

#### 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

- Station Message Detail Recording (SMDR)
- 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
- 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 QSIG
- 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 Proprietary Telephone (IP-PT) Features

- IP Proprietary Telephone (IP-PT)

#### 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

Some models will be available to limited Countries. Design and specifications subject to change without notice.

Available at: Jia Ying Trading Pte Ltd  
1 Rochor Canal Road #02-67/69/34-37 Sim Lim Square Singapore 188504  
Tel: 63360404 Fax: 63380404 www.jiaying.com jiaying@singnet.com.sg

KX-TDA1D-ESP 1011ITP-3 Printed in Japan