

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 | | Voice Message | 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 | • 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 | | Hospitality and Charge Management Features | SVM Total Recording Time | 40, 60, or 120 minutes (depending on the recording quality) | | |
| | Tenant | 8 | | | 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 | | | Programmer 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 | | | | | | |

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