Panasonic
ideas for life

Hybrid IP PBX System

KX-TDA30

The Networked System that
Maximizes Your Business Performance
in an Age of Convergence

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Creating an Intelligent Communications Environment

Branch Offices

Factories

Corporate Offices

SOHO

Retailers

Revolutionary changes are occurring today in both telecommunications and information technologies.

Panasonic's Hybrid IP PBX system is a powerful communications tool designed to support businesses in today's Converged Networking age. The KX-TDA30 provides advanced telephone and messaging solutions, efficient and flexible communications, DECT Wireless Mobility as well as Voice-Over-IP.

In line with Panasonic's commitment to user-friendly operation, the Hybrid IP PBX system is easy to use, even if you don't have a lot of IP experience. KX-TDA30 lets you keep pace with leading-edge technology and features that will completely transform the way your company communicates.

Makes Communications Easy

Panasonic's digital telephones are stylish, easy to use, and efficient.
With their large, easy-to-read LCD and four tilt positions, they make life easier for their
users and look great too.

Alphanumeric Display

Visual feedback on this user-friendly display makes it easier to handle calls and perform other tasks. Use it to view a variety of information (see list below) or to access the Hybrid IP PBX system's many features. You can also **make** calls by simply **following** the **visual** prompts shown on the display.

High Definition (HD) Audio (Handset and Speakerphone)

Electonic Hook Switch (EHS) and 2.5 mm Headset Jack for Hands-Free Convenience

Message/Ringer Lamp (Red/Green)

The large, easy-to-see lamp illuminates to indicate when a call comes in, so you can tell when the telephone is ringing even from a distance. The colour of the lamp indicates the status – flashing green for an internal extension line, flashing red f or an outside line, and constant red to indicate that a caller has left a message.

KX-DT546

- 6-Line Back-lit Display, 24 CO Keys, and a Full-Duplex Speakerphone
- Optional 48 CO Keys

Time-Saving, Easy-to-Use Navigator Key

Digital Speakerphone

Programmable Keys with Red/Green LED

Multi-language Capability

The Hybrid IP PBX accommodates up to five different languages, for use in areas where more than one language is commonly spoken. The language can be set at the PBX for a specific telephone extension, to meet the needs of the person who uses that extension.

eXtra Device Port (XDP) and Digital XDP

Use the XDP to add an analogue phone, cordless phone, or other single-line device to your system, without the cost of an additional line. This lets you send a fax while talking to a customer. Or, by connecting a modem to the XDP, you can download data from your PC or access the Internet while talking. The Digital XDP allows you to increase the number of digital telephones without additional cards. It lets you put functional digital phones in the hands of more of your staff to boost overall office productivity.
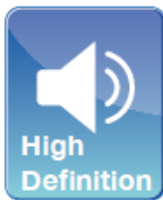
Wall Mountable (optional)

4

The Perfect Match – Panasonic Digital Telephones

Digital telephony was established in the 1980's as a technological progression from the traditional analogue telephony system. It is reliable and provides a wide range of features.

The Panasonic KX-DT500 Series advanced desktop phones are designed for business users who require a range of feature-rich telephony devices to match their constantly changing business needs.

These easy to use, advanced business class telephone devices are designed for effective daily communications. Connected to the Panasonic IP PBX Communication platforms, the digital terminals are extremely reliable and provide a wide range of features to support the right solution for all your business applications.

KX-DT546 ⊃
- 6-Line Backlit Display
- 24 Flexible CO Buttons
- Full-Duplex Speakphone with Wideband Audio
- Electronic Hook Switch (EHS) and 2.5 mm Port
- Add-on 48-Key Module (Optional: KX-DT590)

KX-DT543 ⊃
- 3-Line Backlit Display
- 24 Flexible CO Buttons
- Full-Duplex Speakphone with Wideband Audio
- Electronic Hook Switch (EHS) and 2.5 mm Port
- Add-on 48-Key Module (Optional: KX-DT590)

KX-DT521 ⊃
- 1-Line Backlit Display
- 8 Flexible CO Buttons
- Full-Duplex Speakphone with Wideband Audio
- Headset Jack (2.5 mm Port)

OPTIONS FOR KX-NT

Add-on Key Module

KX-NT505 ⊃
Add-on 48-Key Module *(for KX-NT533 and KX-NT556 only)*

OPTIONS FOR KX-DT
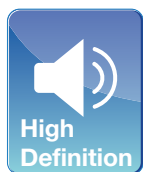
Add-on Key Module

KX-DT590 ⊃
Add-on 48-Key Module *(for KX-DT543 and KX-DT546 only)*

IP Proprietary Telephones

KX-NT500 – The Perfect Team Player

The Panasonic KX-NT500 Series advanced IP desktop phones are designed for business users who require a range of feature-rich telephony devices to compliment their constantly changing business needs. Connected to a Panasonic Communication Platform these IP terminals are extremely reliable and provide a wide range of features to support the right solution for all your business applications. Ergonomically designed with features and functions to enhance users daily productivity, they are ideal for many applications including contact centre agents or advanced desktop applications supporting a range of wired and Bluetooth® headsets (NT560 only).

High Definition

Wireless

EHS

Dual Ethernet Ports

KX-NT560
- General Office / Executive Users
- 4.4¨ Monochrome LCD
- Paper Free Labeling
- Full-Duplex Speakerphone with Wideband Audio / HD Voice
- Built-in Bluetooth®
- Electronic Hook Switch (EHS)
- 2 Gigabit Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption

KX-NT556/553
- IP Terminal for General Office Use
- **6/3**-Line LCD Display
- Full-Duplex Speakerphone with Wideband Audio / HD Voice
- Paper Free Labeling
- Electronic Hook Switch (EHS)
- 2 Gigabit Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption

KX-NT546/543
- IP Terminal for General Office Use
- **6/3**-Line LCD Display
- Electronic Hook Switch (EHS)
- 2 Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption

KX-NT551
- IP Terminal for Office Use
- **1**-Line LCD Display
- Full-Duplex Speakerphone with Wideband Audio / HD Voice
- 2 Gigabit Ethernet ports, PoE
- Extended Handset Cords
- Low standby power consumption

NT556 Image

NT543 Image

Every Call Matters

Whether you work in an office, a factory, a warehouse, a supermarket, or other large facility, the Multi-Cell DECT system keeps you in constant touch with colleagues and customers even when you are not at your desk. Communication can easily be extended outside the office by enabling mobile integration functionality. Enjoy the freedom to communicate wirelessly with crystal clear voice quality. Receive your customers' calls wherever you may be and make the most of every business opportunity that comes along.

Tough Model
KX-TCA385

- 1.8 inch Colour LCD
- IP65 Compliant Dust Protection and Splash Resistance
- Shock Resistant *[1]
- Noise Reduction
- Printed Areas Peel Proof
- DECT Paging
- Call Log (PBX)
- 12 Flexible Keys
- 3 Soft Keys
- Speaker Phone (Full Duplex)
- Vibration
- Built-in Bluetooth®

*1 Sturdiness confirmed by dropping the handset 12 times from a height of 200 cm in an IEC60068-2-32 compliant test.

Ringer / charge LED
Strap hole
Receiver
1.8 inch colour LCD with backlight
3 soft keys
Navigation key
Key backlight
Printed areas peel proof and easy to read
Microphone

Wall mountable Charger
*Without belt clip

Slim & Light Model
KX-TCA285

Standard Model
KX-TCA185

- 1.8 inch Colour LCD
- Noise Reduction
- DECT Paging
- Call Log
- 12 Flexible Keys
- 3 Soft Keys
- Speaker Phone (Full Duplex)
- Vibration
- Built-in Bluetooth®
  (for the KX-TCA285)

KX-TCA285

Slim and light model ideal for offices with active movement

Ringer / charge LED
Receiver
Strap hole 1
Belt clip hole
Headset connection
1.8 inch colour LCD with backlight
Wall mountable charger
3 soft keys
Navigation key
Key backlight
Section keys
Strap hole 2
Microphone

KX-TCA185

Standard model ideal for ordinary offices

Large Ringer / charge LED
Receiver
Strap hole 1
Belt clip hole
1.8 inch colour LCD with backlight
Wall mountable charger
3 soft keys
Navigation key
Headset connection
Key backlight
Strap hole 2
Microphone

An Affordable System that Improves Efficiency

With its intelligent call-handling functions, the Panasonic Hybrid IP PBX system can serve as the core of an efficient small contact centre for outstanding customer service. Use the Hybrid IP PBX to automatically distribute incoming calls as desired.

Calls can be queued while your team is busy on the telephone; pre-recorded messages can be played to reassure callers while they wait for their call to be answered. If there is no reply or if the phones are all busy, music or pre-recorded promotional messages can be played on hold. You can also assign a backup extension as an overflow destination for calls not answered within a specified period of time.

The system provides a variety of call distribution patterns. Effective use of the different patterns – Automatic Call Distribution (ACD)*, Uniform Call Distribution (UCD), Priority Hunting, and Simultaneous Ring – can help you manage calls more efficiently.

Group Features
- VIP Call (Priority Answer)
- CLIP Distribution
- Queuing Table

Agent Features
- Log-in / Log-out
- Ready / Not Ready
- Wrap up

Supervisor Features
- Monitoring group activity in real time, with real-time display view
- Historical analysis
- Agent management with DSS
- Agent status monitor
- Remote agent log-in / out by DSS
- Autoanswer by headset

Messaging that Adds More Value and Accuracy to Your Business

Panasonic Voice Processing Systems let you to record, send and retrieve messages 24 hours a day, 7 days a week world-wide, and help to efficiently handle your telephone system traffic and internal communication needs.

If you are short of staff, you can handle calls with the Automated Attendant Service.

You can even customise the system to meet the needs of different callers using Multilingual Service and Caller ID Call Routing. By combining this with a Panasonic Voice Mail System, you can get additional features that are available only from Panasonic, such as Live Call Screening, Two-Way Recording, and Two-Way Transfer.

Multiple PBXs can also share a single voice mail unit to enable centralized voice mail control.*

*Requires the optional KXTDA3920 SD Feature Enhancement card

Higher Productivity, Greater Customer Satisfaction

An optional USB port makes it easy to connect a Panasonic digital telephone to your personal computer. Using PC Phone and PC Console software, you can integrate your phone system with a database, giving you a powerful support tool for Customer Relationship Management (CRM).

The caller's ID and other information automatically pop up on your PC's display before you take the call. This makes it easy to give your customers a level of service that reflects well on your company. The easier the operator can transfer the customer to the correct person, the more professional your organization looks and the more efficient you operate.

You can add a doorphone for increased security.

Panasonic Helps to Cut Costs

Least Cost Routing (LCR) saves money by choosing the most inexpensive calling route. To prevent unauthorized people from using the telephone, you can set each extension to require a password for outgoing calls. A time limit can also be set on conversations.
Using a VoIP gateway, the Hybrid IP PBX converts telephone voice signals into IP packets, making it possible for you to use VoIP technology with your present telephone units. VoIP allows simultaneous voice and data transmission on your existing managed data network.

VoIP is an ideal solution for site-to-site communications between multi-site offices and retail chains - as well as for networking branch office and remote office employees, small office/home office (SOHO) workers, and home sales personnel, allowing for flexible working environment and lowering cost.

Company-wide Voice Network

The Hybrid IP PBX can serve as the core of an inexpensive, easy-to-use interoffice networking system. It uses existing data services as if it were a private line. The KX-TDA30 supports closed number dialling and digit translation to create your own private digital network.
The KX-TDA30 also supports QSIG* protocol, allowing you to interconnect numerous PBX locations into a large, effectively seamless virtual telephone system, and giving you access to more advanced communication functions. As an example, for customers with a Panasonic KX-TDA/TDE/NCP/NS in the head office, QSIG can be used to implement KX-TDA30s in all the branch offices. Using the network numbering plan, you can assign a telephone number to each extension in a branch or head office, reducing communication costs.

* QSIG is an industry-standard digital networking protocol. QSIG Networking is available with PBX systems that support ISDN BRI QSIG.

250 Network DSS keys for 8 PBX systems*

8 PBX systems in a private network can have a maximum of 250 network extensions stored on DSS keys (N-DSS: Network-DSS), in order to monitor busy user status across a network of KX-TDA/TDE PBXs. In addition to the Network Operator, this feature has now been expanded to allow any extension on a network the ability to monitor .

*Requires the optional KXTDA3920 SD Feature Enhancement card

Feature List

System Features

- Automatic Fax Transfer
- Automatic Route Selection (ARS)/ Least Cost Routing (LCR)
- Background Music (BGM)
- Busy on Busy
- CTI (CSTA,TAPI)
- Call Park with Indication
- Call Pickup Group
- Calling Line Identification Distribution (CLI)
- Class of Service (COS)
- Data Line Security
- Delayed Ringing
- Direct In Lines (DIL)
- Direct Inward Dialling ON SIP Trunks
- Direct Inward System Access (DISA)
- Door-Phone/Door Opener
- Echo Cancellation
- Extension Lock
- Emergency Call
- Existing APT/DPT Compatibility
- External BGM
- External Sensor/Relay for Alarm Notification
- Flexible Numbering Plan (4 digits)
- Floating Extension
- Greeting Message
- Host PBX Access Code
- Hunting Group
- Hurry-Up Transfer
- Incoming Group (Hunting Group)
- Intercept Routing - Busy/DND
- Intercept Routing - No Answer
- Intercept to Trunk
- Main Processing (MPR), Card/CS Software Download
- Manager Functions
- Multiple Language Support
- Online Diagnostics
- Operator Functions
- PC Console/PC Phone
- PC Programming
- Paging Group
- Quick Setup
- Remote Alarm Notification
- Remote Extension Status Control through DISA
- Remote Extension Lock
- Ring Group
- Special Carrier Access
- Station Message Detail Recording (SMDR)
- Tenant Service
- Timed Reminder
- Time Service (Day/Night/Lunch/Break)
- Toll Restriction
- Trunk Group
- Uniform Call Distribution (UCD)
- User Group
- VIP-Call
- Visual Caller ID

<Voice Mail (VM) Features>
- Automatic Configuration - Quick Setup
- Call Forwarding to VM
- Caller's Identification Notification to VM
- Centralized VM
- E-mail Integration**
- Intercept Routing to VM
- Live Call Screening (LCS)
- Remote PBX Data Control by VM
- Telephone Display, Menu Driven VM Operation
- VM Data Control by PBX
- VM (Digital/DTMF) Integration
- VM Mail Transfer
- VM Menu on the LCD* (KX-T7636/T7633 only)

- Dial Type Selection
- Digital SP-phone
- Digital eXtra Device Port (DXDP)
- Direct One-Touch Answering
- Do Not Disturb (DND), DND Override
- DSS Console
- Executive Busy Override
- Extension Directory
- Extension-to-Trunk Call Duration Time
- External Feature Access
- Flexible Buttons
- Hands-free Operation
- Handset/Headset Selection
- Hot Line
- Large LCD Features with Back-lit
- Last Number Redial
- Log-In/Log-Out
- Message Waiting
- Multi-Lingual Display
- Multiple Hop Call Forwarding (4 steps)
- Music on Hold
- Off-Hook Call Announcement (OHCA)
- Off-Hook Monitor
- One-Touch Dialling
- Paging (Deny, Paging Transfer)
- Paralleled Telephone (APT/DPT+SLT, DPT/SLT+PS)
- Redial, Last Number
- Remote Station Control
- Special Carrier Access
- Speed Dialling - Personal/System
- Time and Date Display
- Tone-Pulse Conversion
- Trunk Answer from Any Station (TAFAS)
- Walking COS
- Whisper OHCA (Off-Hook Call Announcement)
- Wrap-Up
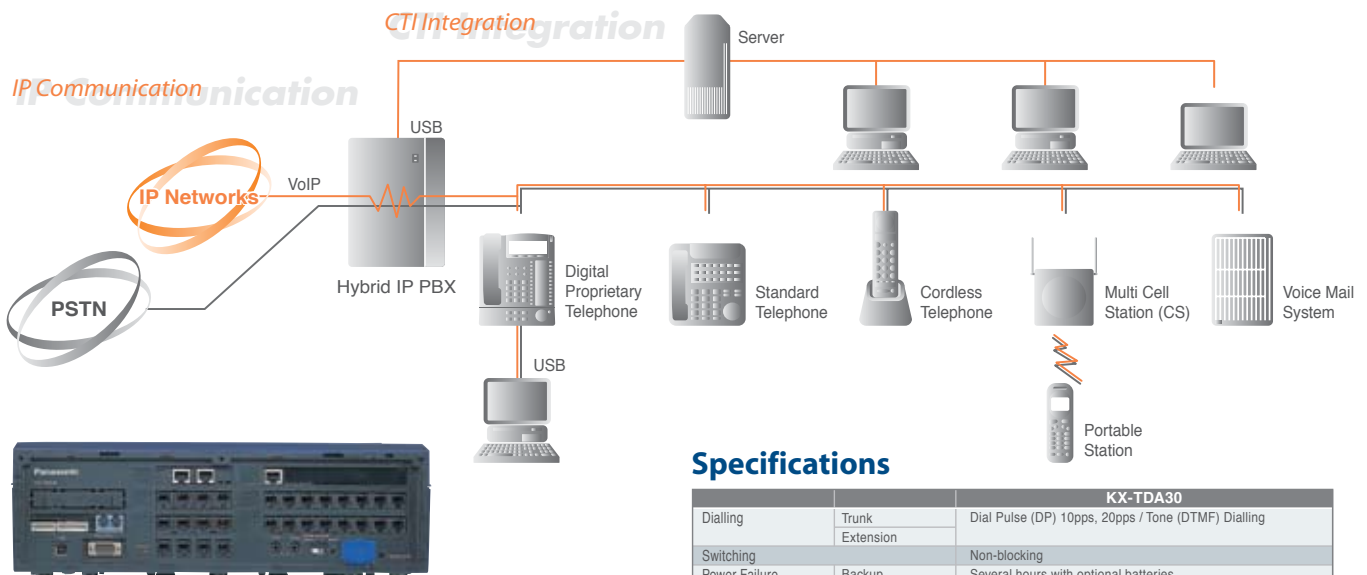- eXtra Device Port (XDP)

<DECT Features>
- Automatic Handover
- Headset Compatibility
- Incoming & Outgoing Call Log
- PS Roaming
- Wireless XDP Parallel Mode
- Vibrator Ring

Networking Features

- ARS with VoIP
- DISA Call to the Network
- Network Closed Numbering
- Network ICD group**
- Private Network to Public Network
- Public Network to Private Network
- Transfer to Network PBX
- Virtual Private Network (VPN)
- VoIP Network (Optional IP-GW)
- 250 Network DSS keys for 8 PBXs**

Extension Features

- Absent Message
- Account Code Entry (Forced)
- Automatic Callback Busy
- Automatic Redial
- Boss - Secretary
- Broadcasting
- Caller ID to SLT
- Call Forwarding (All Calls, Busy, Busy/No Answer, No Answer, Follow Me, From Incoming Group)
- Call Hold
- Call Pickup (Directed, Group, DSS, Deny)
- Call Splitting
- Call Transfer (Screened, Unscreened, One-Touch Transfer, Transfer Recall)
- Conference (3-Party Conference, Multi Party Conference, Unattended Conference)
- Conference with Broadcasting up to 32-Party

Server

IP Networks VoIP

PSTN

USB

Hybrid IP PBX

USB

Digital Proprietary Telephone

Standard Telephone

Cordless Telephone

Multi Cell Station (CS)

Voice Mail System

Portable Station

System Capacity

Maximum Configuration

The Hybrid IP-PBX supports the following configuration.

Line Type	Maximum Number
Trunk Line	12
VoIP Line	4
SIP Trunking	4

Maximum Terminal Equipment

Terminal Equipment Type	Without Additional AC Adapter	With Additional AC Adapter	
	Without MEC Card	Without MEC Card	With MEC Card
SLT	24	24	
KX-DT300/500 series DPT/DSS console	Total 24	Total 24	Total 48
KX-DT300/500 series DPT	24	24	48
KX-DT300/500 series DSS	4	4	
Cell Stationconsole	4	8	
Wireless Telephone	28	28	
Voice Processing System	1 System[*1]	1 System[*1]	
SLT, PT, DSS console, and VPS	Total 28	Total 28	Total 52
Door Opener	4	4	
Doorphone	4	4	
External Sensor	4	4	
External Relay	4	4	

[*1] A maximum of 8 channels of a single VPS can be connected to the Hybrid IP- PBX.
[*2] Five licenses are provided on each CD-ROM.

Option List

Model	Description
KX-TDA3171	4-Port Digital Extension Card (DLC4)
KX-TDA3172	8-Port Digital Extension Card (DLC8)
KX-TDA3173	4-Port Single Line Telephone Extension Card (SLC4)
KX-TDA3174	8-Port Single Line Telephone Extension Card (SLC8)
KX-TDA3180	4-Port Analogue Trunk Card (LCOT4)
KX-TDA3193	4-Port Caller ID Card (CID4)
KX-TDA3450	4-Channel SIP Trunk Card
KX-TDA3451	4-Channel SIP Expansion Card
KX-TDA3470	4-Channel IP Extension Card
KX-TDA3480	4-Channel VoIP Gateway Card (IP-GW4)
KX-TDA3105	Memory Expansion Card (MEC)
KX-TDA3161	4-Port Doorphone and External Input / Output Card for KX-T7765 (DPH4)
KX-TDA3166	8-Channel Echo Canceller Card (ECHO8)
KX-TDA3168	Extension Caller ID Card (EXT-CID)
KX-TDA3194	Enhanced Simplified Voicemail Card
KX-TDA3196	Remote Card (RMT)
KX-TDA3920	SD Memory Card for Software Upgrade to Enhanced Version
KX-TDA0155	2-Channel Cell Station Unit for DECT Portable Station
KX-TDA0158	8-Channel Cell Station Unit for DECT Portable Station
KX-A236	Additional AC Adaptor
KX-A228	S/M-type Back-up Battery Cable
KX-T7765	Doorphone

+ Please refer to System Capacity chart.

Specifications

		KX-TDA30
Dialling	Trunk	Dial Pulse (DP) 10pps, 20pps / Tone (DTMF) Dialling
	Extension	
Switching		Non-blocking
Power Failure	Backup	Several hours with optional batteries
Connections	Trunk	RJ11 connector
	Extension	RJ11 connector
	Paging Output	2-conductor jack (MINI JACK3.5mm diameter)
	External (Music on Hold) output	1 conductor jack
Serial Interface Port	RS-232C	1 (Max. 115.2kbps)
	USB	1
SMDR	Detail Recording	Date, Time, Extension Number, CO Line Number, Dialled Number, Call Duration, Account Code
Power Source		100V AC to 240V AC, 1.5A, 50Hz / 60Hz
Power Consumption (Average)		55W
Safety Certification		UL, CSA, SEMKO, GS
Dimensions (W x H x D)		275 x 376 x 117mm
Weight (full mounted)		3.5kg

System Feature Capacity

		KX-TDA30	
System	Tenant	8	
	Class of Service	64	
	Trunk Group	64	
	Paging Group	32	
	Call Pickup Group	64	
	Incoming Call Distribution Group	128 (32 extensions/group)	
	VM (DPT) Group	1 group x 4 ports (8 channels)	
	VM (DTMF) Group	2 groups x 24 ch	
	Queuing Time Table	64	
	Idle Extension Hunting Group	64 (16 extensions/group)	
	SMDR Call Storage	200 calls	
	Absent Message (System/Extension)	8 messages x 16 characters / 1 message x 16 characters	
	Message Waiting – PT+SLT	256	
	Number of characters for Display ID	20	
	Extension Number	1-4 digits	
	Call Park Area	100	
	Conference	3-8 parties per conference (32 parties total)	
	Verified Code	4 digits (1000 entries)	
	Verified Code Personal Identification Number (PIN)	10 digits (1000 entries)	
	Special Carrier Code	16 digits (20 entries)	
	Host PBX Access Code	10 digits (10 entries/Trunk Group)	
	DDI/DID Table	32 digits (1000 entries)	
Dialing	Emergency Call	32 digits (10 entries)	
	Quick Dialling	4 digits (80 entries)	
	System Speed Dialling	Without MEC	32 digits, 1000 entries
		With MEC	Additional 1000 32-digit entries
	Personal Speed Dialling	Without MEC	32 digits, 10 entries/extn.
		With MEC	32 digits, 100 entries/extn.
	Hot Line	32 digits	
	Redial	32 digits	
ARS	Routing Plan Table	16 entries	
	Leading Number Table	16 digits (1000 entries)	
	Leading Number Exception Table	16 digits, 200 entries	
	ARS Carrier	10	
	Itemised Billing Code	10 digits	
	Authorisation Code	10 digits	
Networking	TIE Routing Table	32 entries	
	Leading Number	3 digits	
	PBX Code	7 digits	
	NDSS: Monitored PBXs	8	
	NDSS: Registered Extensions for Monitoring PBX	250	
Toll Restriction	Toll Restriction Level	7	
	Toll Restriction Denied Code	16 digits (100 entries/level)	
	Toll Restriction Exception Code	16 digits (100 entries/level)	
Call Log	Outgoing Call Log – PT	100 records/extn. 240 records/system	
	Outgoing Call Log – PS	100 records/extn. 140 records/system	
	Incoming Call Log – PT	100 records/extn. 480 records/system	
	Incoming Call Log – PS+ Incoming Call Distribution Group	100 records/extn. or group Total 2048 records/system	

NOTES:

Panasonic®