



TDS Hybrid IP Communication System

General Description

V 3.2

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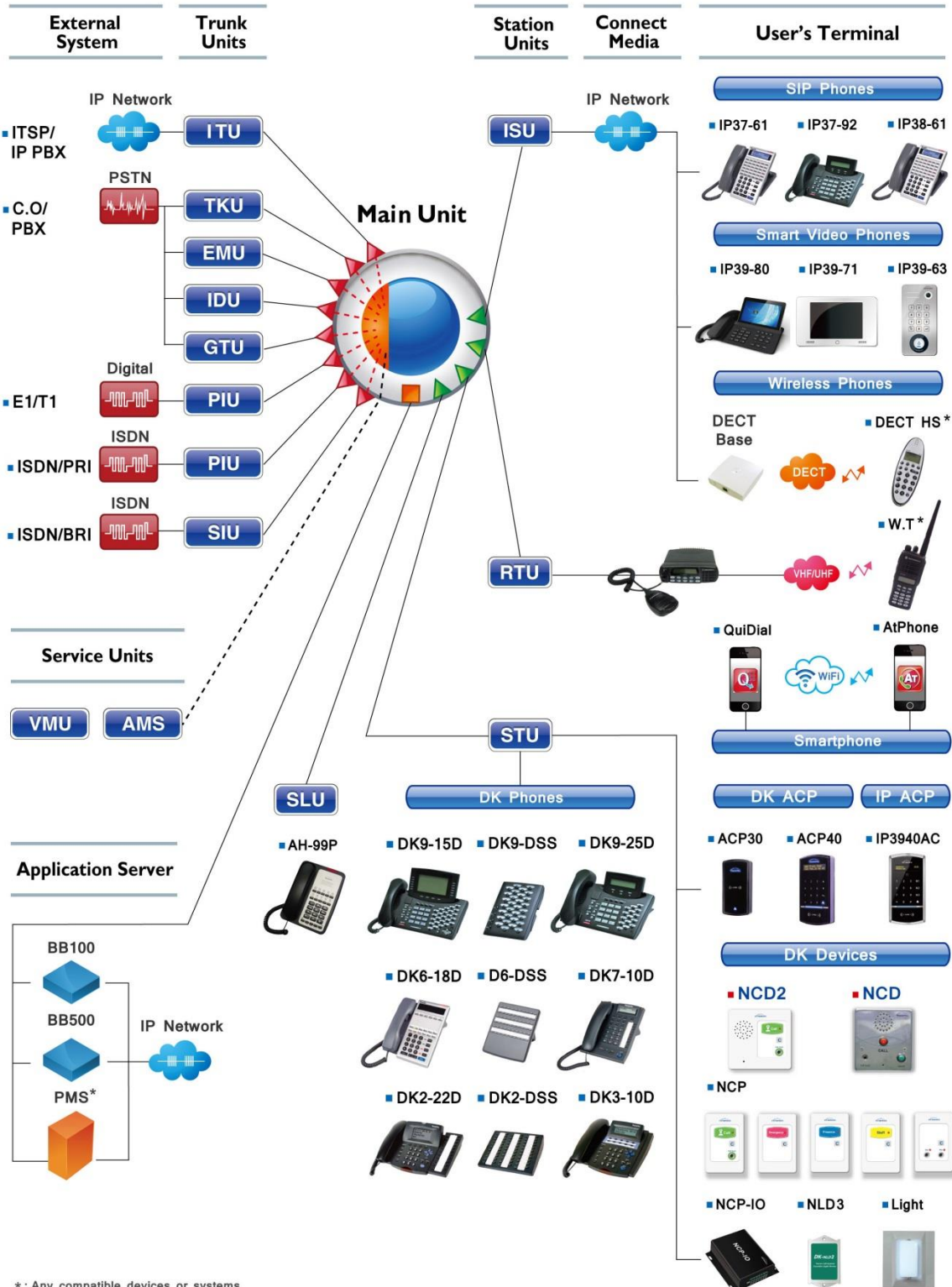
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System Block Diagram

System Block Diagram - TDS



General Description

The TransTel TDS Hybrid IP Communication System employs multi-embedded systems to build a Time-division Digital, ISDN and IP based modern voice & video communication platform. The TDS System is flexibly designed for small, medium and large customers with varied configuration needs. The TDS software is applications oriented and can support Office, Hotel, Health Care, Education, Multi Site Networking and Congregate Housing.

At the forefront of the system design is a universal concept to adapting and connecting with a variety of communication devices. The Hybrid IP design in the TDS infrastructure offers a variety of configuration options including PSTN (Public Switched Telephone Network), ISDN (Integrated Service Digital Network) and V2IP (Voice and Video over Internet Protocol).

TransTel Digital Telephones offer thoughtfully designed productive feature access to keep you connected with one another and your customers. Transtel Access Control phones with Proximity card (RFID) receivers provide an integrated solution for Intercom and Door Access Control. Transtel Nurse Call Devices that interface to a variety of Nurse Call Panels provide innovative solutions (Intercom and Nurse Call indication) for the Health Care industry. Transtel VoIP Based Telephone Sets and Transtel V2IP (Voice & Video over IP) soft phone applications provide the capability to link remote extensions (anywhere that Internet is accessible) together with the home office providing a unified communication solution for all employees regardless of their location. Transtel "Be-Paged" Single Line Phone can be installed in a hotel guest room or school classroom as a normal telephone device with unique be-paged feature like Public Paging for emergency evacuation or lockdown announcement. TransTel technology leads the industry in providing for compatibility with devices such as fax machines, answering machines, cordless phones and SIP protocol VoIP or V2IP office/home equipment.

Key Highlights of the TDS series include:

Flexible System Building Blocks & Configuration Options

The TDS System has multiple cabinet selections ranging from small configurations to over 1,000 ports. The powerful software options are shared across all platforms regardless of size. A special benefit is that TDS hardware can be migrated as customers grow and expand their operations and enterprises. Customers can keep their telephones in place and move their station and trunk interfaces into the next sized cabinet configuration, making an upgrade cost effective and seamless.

Configuration options are as follows:

MMD40/TDS40 – This cabinet can support up to 16 analog trunks and 32 stations. This cabinet configuration can also support a full PRI (Primary Rate Interface), PLUS 8 analog trunks and 32 stations.

MMD80/TDS80 – This main equipment cabinet configuration supports up to 80 ports. There are 10 card slots that can be used for digital and single line stations, VOIP stations, SIP trunking, Analog trunking, Primary Rate Interface. The main processor in the MMD80/TDS80 will support the addition of 1 (one) expansion cabinet adding an additional 80 ports for a total of 160 ports.

MMD80/TDS320 – This is an 80 port main equipment cabinet with a Main Processor Unit capable of supporting up to 320 ports simply by addition additional expansion cabinets. (EMD80)

Supports up to 4 cabinets total for 320 ports

Example:

MMD80/TDS320 Main Cabinet – 80 Ports

- (1) EMD80 = 160 ports
- (2) EMD80= 240 ports
- (3) EMD80= 320 ports

MMD80/TDS640 - This is an 80 port main equipment cabinet with a Main Processor Unit capable of supporting up to 640 ports simply by installing additional expansion cabinets. (EMD80)

Supports up to 8 cabinets total for 640 ports

Example:

MMD80/TDS320 Main Cabinet – 80 Ports

- (1) EMD80 = 160 ports
- (2) EMD80 = 240 ports
- (3) EMD80 = 320 ports
- (4) EMD80 = 400 ports
- (5) EMD80 = 480 ports
- (6) EMD80 = 560 ports
- (7) EMD80 = 640 ports

MMD1280 / TDS-1280 – This cabinet configuration is dedicated for a large sized system that can handle up to 16 EMD80's for a total of 1280 ports. The main controller may be equipped for redundancy option in the Main Processor and Power Supply section. The maximum number of trunk ports is 500 and 1280 extensions.

Leading Edge Applications Based Interfaces

With more than 20 years development experience, Transtel TDS Systems offer a wide array of cleverly and purposefully designed interfaces and applications that are useful in today's communications environment.

PSTN (Public Switched Telephone Network):

- Normal Order Interface: Loop Start with optional FSK/DTMF caller ID, E1 and T1, ISDN PRI
- Special Order Interface: Ground Start, E & M, Direct Inward Dialing

ISDN (Integrated Service Digital Network):

- BRI (Basic Rate), PRI (Primary Rate)

Note: Transtel G2-PIU is a Combo card for E1/T1 or ISDN Primary Rate Interface.

VoIP (Voice over Internet Protocol):

- SIP Trunk and SIP Tie-Trunk

Digital Key Telephone Interface (STU):

- Two wire non-polarity Digital port for all Transtel DK port devices:
Digital Key Telephone, Access Control Phone, Nurse Call Device, Elevator Lift Phone.

Single Line Telephone Interface (SLU):

- Transtel "Be-Paged" SLT (Single Line Telephone), Industry Standard POTS (Plain Old Telephone Set), Cordless phone, Fax machine, answering machine.
- Each port has individual DTMF decoder for non-blocking DTMF decoding, high voltage ringing signal, high voltage message lamp signal, voltage polarity reverse and current break capability.
- Offers lightening protection MOV circuitry and is a carrier grade interface.

IP Station Interface (ISU):

- IP Station Interface (G2-ISU8 /G2-ISU16) for Transtel IP key telephone (IP38 series) and IP37, IP39 and other industry standard SIP phones on the market.
- To increase the density of ISU, two special models of ISU card are offered: Transtel G2-ISU8M24 can be registered for 24 SIP phones with 8 common channels and G2-ISU16M48 is for 48 SIP phones with 16 common channels per card. Only IP37 and IP39 phone can be registered on these cards.

- Transtel ISU has a smart identity feature to download the DSS button configuration database (same as the DK phone defined by MPU) automatically when Transtel IP37 phone are registered. Button mapping for feature use becomes an automatic function saving users from have to configure for each telephone set location.

Walkie-Talkie Interface/Remote Trunk Unit

- G2-RTU is specially designed to link mobile walkie-talkie work groups with station users' inside the TDS telephone system. Transtel key phone station users can monitor one dedicated channel of walkie-talkie mobile phone at the same time or access different channels by individual access button with LED indication. The remote trunk unit bridges communications capabilities between maintenance or service staff members and administrative/management support. This bridge of communication enhances delivered service times and improves efficiencies within work groups.

Digital Key Telephones (DK Phone)

- There are four different series of Key Telephones available: DK2, DK6, DK7 and DK9 series.
- There are different LCD displays for each model to address various customer requirements. Options include: 16x2 (32 characters), 16x4 (64 characters) and 20x8 (160 characters)
- The information on the LCD includes name and extension number of the user, the caller ID of external incoming line or intercom, Called history, missed call information, how many voice mails in your mail box, speed dial name and number, call duration, camp on message during conversation with other parties, and much more.

Access Control Door Phone (ACP)

- There are two series of Access Door Phone with optional RFID detector: ACP40 and ACP30.
- Each ACP has its door open sensor and door open relay.
- Applications for the ACP units range from simple door box operation to sophisticated RFID security protection access.
- Advance routing options from calling a station directly to a group of stations and even and outside telephone number are available for both day and night modes of operation.
- The ACP also can work as an Emergency button to activate the emergency operation.
- TransTel ACP design is advanced without any physical buttons which enhances produce quality and endurance. The units incorporate a blue LED for easy access at night or in dark environments.
- ACP units can be programmed and configured to allow entry into a door way by time of day and day of week. Privileges can be given to employees for access to doors via password or an assigned RFID card.
- ACP activity can be recorded and tracked through TransTel's innovative Bluebox Application server, or directed to a printer or file for later review.
- The ACP40 has 6 lines of free text that can be programmed for operating instructions to users that walk up to the unit. There are different instructions that can be programmed for both day and night modes of operation.

Nurse Call Devices (NCD)

- Nurse Call Devices are the primary interface and communications unit for the patient room. This Nurse Call Device connects to a digital station port in the TDS system and has full-duplex speakerphone performance with an embedded Emergency call button and LED status indication. Multi-relays on this device can control a Room Lamp to show different patient status. The Nurse Call Device is the interface "hub" for various types of Nurse Call Panels. The Nurse Call Panels are connected to the Nurse Call Device via industry standard RS-485 interface. One Nurse Call Device can link up to a maximum of 6 zones of maximum 30 Nurse Call Panels through its RS485 interface.

Nurse Call Panels (NCP)

- Nurse Call Panels are specially designed units that are installed for the purpose of providing needed assistance and communications between patients and nursing staff. Nurse Call Panels are installed in each

room according to the patient's needs. The Nurse Call Panels connect to the Nurse Call Device. Current Nurse Call Panels are described below.

NCD-NCP-PC: Patient Call (Green button)
NCD-NCP-EC: Emergency Call (Red button)
NCD-NCP-NP: Nurse Presence (Blue button)
NCD-NCP-BE: Bathroom Emergency Call (Red button)
NCD-NCP-BW: Bed Exit, Bed Wet
NCD-NCP-SC: Staff Call (Yellow button)

- NCP-IO is a special control device (4 Data output and 8 Data input) is linked with NCD and managed by Bluebox (refer to the description below) to provide the floor access control or different surveillance requirement.

Be-Paged Single Line Phone

- Transtel Be-Paged SLT has a be-paged feature that allows common paging announcement to be broadcasted on this SLT's speaker. Hook-delay feature (positive disconnect) can eliminate the un-wanted Flash signal (causing hold and ringback) when user places the handset back to the cradle of phone.

VoIP and V2IP hard and soft phones

- Transtel IP38 Series IP Hard Phone has a proprietary protocol to link with the host TDS. IP38 Series has the same characteristics as a DK digital telephone set installed and operating on the host TDS system. The IP38 Series is ideal for employees working from their home or any location remote from the main office, but with all the same features and capabilities of an onsite digital telephone set.
- Transtel IP37 Series IP Hard phone uses the standard SIP protocol with dedicated provision feature to auto download the Direct Station Selection (DSS) configuration that is assigned by the Main Processor. Due to the smart feature on the ISU (IP Station Unit) card, the Hold and Transfer feature are same as DK. The other features will follow the standard SIP protocol. PoE (Power over Ethernet) are optional features in the IP37 series.
- Transtel IP39 Smart Video Phone Series have IP based technology with optional WiFi capability. There are various models: Desk Top, Wall Mount and Access Door Phone. The desk top and wall mount has 7 inch touch LCD panel to increase the efficiency of operation and provide a multitude of useful features such as: Web Browser, weather, calculator, alarm clock, personal answering machine, voice calling, voice memo, personal secret conversation recorder, currency converter and much more.
- The Access Phone has an indoor and outdoor version: Indoor Acrylic touch panel or outdoor Piezo-key (aluminate non-moveable weather proof keypad).
- AtPhone is a free Soft Phone application available in the Apple store for iPhone. It has DSS buttons and operates with the Transtel ISU (IP Station Unit) card. When ISU has the messaging license, the AtPhone will be auto upgraded to have "phone to phone short messaging" and "auto informed" when licensed Bluebox is implemented.
- This innovative feature allows for the automatic notification of a Nurse Call Request to be transmitted to an iPhone via "SMS" so that a staff nurse can immediately respond to the patient.

It also means that in a School environment when an emergency occurs an "SMS" message can be sent to the appropriate support staff.

TAPI (Telephony Application Programming Interface)

- Transtel T-Server is a server situated between the TDS and customer PC. This server is designed to allow PC clients to activate click to dial capability and receive screen pop information when receiving the caller ID from the TDS.
- Transtel TSP are drivers that must be installed at user's PC to send and receive the information from the above mentioned T-Server.

PMS (Property Management System) and SMDR (Station Messaging Detail Record)

- The TDS offers two major PMS protocols:
 - 1) Micros Fidelio, Opera, Opera Express. Certification Part Number: 5001-194
 - 2) Mitel Emulation
- The following features are supported by both PMS interfaces:
 - ⊗ Check In and Check Out
 - ⊗ Guest Room Status (Clean, Not Clean, etc..)
 - ⊗ Guest Voice Mail Status/ Message Waiting
 - ⊗ Guest Name displayed on the DK phone
 - ⊗ Wake up Service
 - ⊗ Telephone Call Accounting Information (SMDR)
- The following features are supported by Micros/Fidelio only
 - ⊗ Guest Room Move
 - ⊗ Room DND Status
 - ⊗ Room mini-bar POS (Point of Sale) Information
- The SMDR of TDS can be output directly to serial printer with proper header or integrated within the PMS's protocol.
- Above protocol can be linked with PMS server by RS232 or Ethernet IP protocol.

Auto Attendant, Voice Mail, IVR and UMS

There are two series of Voice Service Cards: G2-VMU (Voice Mail Unit) and G2-AMS (Advanced Messaging System).

G2-VMU has Auto Attendant and Voice Mail features.

- G2-VMU2-1G:
 - 8 Ch. Auto Attendants
 - 4 Ch. Voice Mail with total 30 hours storage.
- G2-AMS-8G:
 - 4 or 8 Ch. Auto Attendants and Voice Mail with 250 hours Storage.
 - 250 Mailboxes per card

The AMS has the following advanced features:

- 300 script menus for Interactive Voice Response application.
- Voice mail to e mail notification and playback
- On Line Recording to record the conversation manually or automatically.
- Ethernet port to store the On Line Recording data to external NAS (Network Attached Storage)
- Multiple schedules to support departments or more than one tenant per system
- Multi Language support
- Automatic Fax Detection
- Message Note Reminder
- Caller ID with return callback
- Cascading Notification

Transtel Bluebox Application Server

Transtel Bluebox is a comprehensive applications server that operates together with the TDS Platform to offer the following advanced Computer Telephony features:

Web Console:

The Web Console is a browser based Attendant Console operating in conjunction with a TransTel Digital Telephone Set. It is a powerful and prominent application and most popular within the Bluebox Application Server because of its obvious inherent benefits. The Web Console application offers a highly intuitive graphical interface for managing telephone calls at an Operator Station. Just hover the mouse over an extension icon and click to call. Do the same with outside lines.

QuiDial:

It has same function as Web Console but the device is changed from PC to personal smart phone. User can use smart phone's stored contact information to make dialing for his/her DK phone. QuiDial is a free application in Apple store.

Access Control:

- Proximity cards can be activated or cancelled from the setup page of Access Control.
- A user defined floor map will show the Door access status with the user's photo and its data.
- IP cameras can be monitored by Access Control with dedicated buttons to access it.
- The door access history data can be sorted by date and time, user, door, etc..

Nurse Call System with Short Messaging

- The Nurse Call Monitoring screen will pop-up when a patient presses the Nurse Call Panel. A large LED display panel will show the status simultaneously. Up to 4 AtPhone clients (mobile nurses) can be notified of the assistance request as well. Bluebox application server will send an "sms" message to the AtPhone app. of the smartphone users. The display message will tell the Date/Time, Room Number, Patient name and the button that was activated.
- Supervisor can monitor response time when patient pressed the emergency panel by date and time, room and patient name and also when the nurse responded to the request for assistance.

Supported Applications

Office Application

- Varied Telecom interface options (PSTN/ISDN/VoIP)
- Varied Extension Alternatives (DK phone, IP phone, AtPhone)
- Auto Attendant, Voice Mail, UMS (Unified Messaging), On Line Recording
- TAPI and Call Accounting
- Bluebox: Web Console, Access Control, QuiDial

Hotel Application

- PMS interfaces: Micros/Fidelio/Opera/Opera Express and Mitel Emulation
- Guest voice guided features for voice mail, wake up, do not disturb etc.
- Custom Wake Up recordings
- E911 features to conference front desk and emergency center with auto voice message announcing exact room location for emergency services location identification
- Emergency Evacuation with DSS status to view guest room that received message
- E911 Bumping – Guest requires 911 service to bump existing conversation if all lines are busy.
- Be Paged Single Line Telephone Set
- Handicap Room Services- Emergency pull cord alarm/shower alarm
- Walkie Talkie/Mobile Radio Interface for bridging communications between Hotel and service/maintenance staff
- Two wakeup calls per room
- Calling Guest Room Name Display
- Reservations Call Center
- Suite Service - Multi extensions to share one extension number.
- Bluebox: Web Console, Access Control, AtPhone to inform the recipient with message

Health Care Application

- Nurse Call Device with multiple type Nurse Call Panels
- Bluebox: Access Control, Nurse Call System, Atphone to inform staff with message

Congregate Housing

- Access Control phone, IP video phone
- Bluebox: Access Control, IP Cam monitor, access history and sorting
- Bluebox: Floor map with pop-up user's photo and information
- Emergency paging to single line telephones with TransTel Be Paged Phone

School Districts

- One System networking for station to station intercom dialing
- PRI trunking with shared distribution between school locations for cost savings
- Access Control phone, IP video phone
- Bluebox: Access Control, IP Cam monitor, access history and sorting
- Bluebox: Floor map with pop-up user's photo and information for security
- Emergency paging to single line telephones with TransTel Be Paged Phone

Features

System Capability

Trunk Lines

- . Analog CO line - Loop Start
- . Analog CO line - Ground Start
- . Analog CO line - DID
- . Analog E&M line
- . Digital T1/E1 & PRI
- . Radio / Walkie-Talkie trunk line
- . SIP IP Trunking
- . SIP IP TIE trunk

. ISDN BRI and PRI

- . Call Charge Metering Information
- . Caller Identification
- . Direct Inward Dialing
- . Call Forward Internal / External
- . Call Waiting
- . MSN (Multiple Subscriber Number)
- . Sub-addressing
- . User to User Signaling

Extension Terminal & Peripheral Devices

- . DK Series Digital Key Telephone
- . DK Access Control Phone
- . DK-NCD - NCP/IO (Nurse Call Device)
- . DK-NCD2 - NCP/RS485 (Nurse Call Device & Panels)
- . Be-Paged Single Line Telephone (AH99p)
- . IP Phone with DSS (IP37 Series)
- . IP Keyphone (IP38 series)
- . IP Smart Video Phone (IP39 series)
- . IP Softphone with SMS messaging (AtPhone)
- . Standard SLT (Single Line Telephone)
- . Standard SIP IP phone

Maximum System Capacity

- . Up to 1200 extensions per system
- . Up to 3600 extension
 - Cascade systems together via PRI
 - Tie system together via IP Tie-Trunk

Hardware Installation Capabilities

- . DC Battery Back Up
 - Charging Circuit From System Power Supply
- . UPS Back Up
- . Cabinet Installation - Wall Mount /19" Rack Mount
- . Hot Swap Station / Trunk Cards
- . Circuit Status & System Status LED Indication

External Device Interfaces

- . External Music Source & External Paging
- . RS232 port for Serial Printer or PC
- . Ethernet port for Server /PC through IP Network
- . Sensor & Relay

PABX Key Features - 1

Outside Line

- . *CO Line Ring Assignment*
 - Linear
 - Common Audible
 - Circular
- . Day/Night Service
- . Delayed Ring / Call Coverage
- . Night Transfer
- . Direct In Line
- . Distinctive Ringing
- . External Call Forwarding
- . Automatic Line Search
- . CO Line Name Programming
- . Power Failure Transfer
- . Toll Control Day / Night
- . Trunk to Trunk connection
- . IP Tie-Trunk for system expansion
- . Uniform Call Distribution

Auto Attendant

- . Multi Languages
- . Script menus: 300 sets
- . Greeting: Day/Night/Lunch/Holiday
- . Automatic Transfer Call
- . Single Digit Dialing to Mailbox, Script or Extension
- . Multi Level Menu Tree Options
- . Automatic Schedule For Day/Night/Lunch/Holiday
- . Directory Dialing

Voice Mail

- . Personal Voice Mail
- . Virtual Voice Mail
- . Reply Voice Mail Call
- . Leave message to another extension
- . Broadcast Voice Messaging
- . Fast Forward / Rewind Options
- . Message Playback Direction
- . Message Forward
- . Announcement Only Mailboxes for Directions
- . Message Light Notification
- . Cell Phone Notification
- . Paging Notification
- . Auto Save / Auto Erase after listening to message
- . Include or exclude from Directory Listing option
- . Up to 4 Personal Greeting Recordings
- . Unique Do Not Disturb Recording
- . Record Time selectable on mailbox basis

PABX Key Features - 2

Advanced Messaging Voice Service

- . Interactive Voice Response
- . Multiple schedules / Tenant Services
- . Automatic Fax detection and switching
- . Message Note Reminder
- . Caller ID with Return callback
- . Cascading Notification
- . On Line Recording to NAS (Network Attached Storage)
- . Custom Voice Message
- . Custom Music on Hold source
- . Voice Mail to Email (UMS)

Outside Line Dialing

- . *Behind the PABX*
 - Smart Redial
 - Dial 9 Group
- . Programmable Flash signal
- . Programmable Pause time
- . System Speed Dialing
- . Trunk Queuing
- . Prime Line Selection

Console Features

- . Flexible Attendant Console Assignment
- . Multiple Attendant Console
- . Attendant Overflow
- . Loop Keys
- . System Administration
- . Direct Station Selection
- . Headset Operation

Intercom

- . Intercom Single Digit Assignment
- . Intercom Ring / Voice calling
- . Intercom Calling Restriction
- . Intercom Voice Mail
- . Intercom Caller ID

Group Concept

- . CO Line Groups
- . Station Group
- . Suite Group
- . Toll Plan
- . DSS Key Group
- . Line Hunting Group
- . Station Hunt Group

PABX Key Features - 3

Class of Service

- . Toll Call Control
- . Extension Call Extension
- . DND Override
- . Barge In Override
- . Page
- . Be Paged
- . Monitor
- . Call Duration
- . Forced Account Code
- . Hotline / Extension or Trunk Group
- . Call Split / Broker Call
- . Headset Operation
- . Background Music
- . SMDR
- . Auto Answer / Handsfree Answerback
- . One Touch Dialing
- . Direct Station Selection (DSS)
- . Dual Color LED
- . Call Forward Busy/No Answer
- . Auto Call Recording
- . Group Listen
- . Admin / Guest Class Of Service
- . Plus much more.....

Paging

- . Internal
- . External
- . Zone
- . All Call
- . Meet Me

Password Protection

- DISA Password
- External Call
- Toll Override
- Force Account Code

PABX Key Features - 4

Others

- . Account Code Capability
- . Forced Account Code
- . Conference
- . Distinctive Ringing
- . Flexible Numbering plan: 1 to 8 digits
- . Flexible Time format: 12/24
- . Centrex Operation
- . Exclusive Hold
- . Hold and Hold Recall
- . Blind Transfer
- . Screen Transfer
- . Privacy Release to conference
- . Private Line

System Administration

- . Access Level /Password
- . DISA Password
- . Web Based - Programming
- . Console Phone -Programming
- . On Call Programming
- . Station Lock
- . Outside Line Lock
- . Custom Alarm LCD message

CTI (Computer Telephony Integration)

- . TAPI Server
- . TSP Driver for MS PC

Bluebox Application Server Features

- . Web Console
- . QuiDial
- . Access Control
- . IP Camera Monitoring
- . Nurse Call System
- . IP DECT Messaging (Spectralink - Kirk)
- . WiFi Phone messaging (AtPhone)

PMS Interface (Refer to Hotel Key Features)

Call Accounting (Refer to Hotel Key Features)

Hotel Key Features - 1

Digital Attendant Console

- . Check In
- . Check Out
- . Message Waiting
- . Wake Up
- . Do Not Disturb
- . Toll Class
- . Reset Room Password
- . Admin Voice Services
- . Call Recording
- . Print Wake Up Call History
- . Cancel Wake Up Call History
- . Guest Room Charge Inquiry
- . Print Room Charge
- . Set Credit Limit
- . Room Status Indication

Voice Guided Front Desk Operation

- . Check In & Out
- . Automatic Wake Up
- . Leave Voice Message
- . Do Not Disturb
- . External Message Check:Transfer to Mailbox
- . Reset Room Password
- . Lock & Unlock Room Telephone
- . Voice Service Administration

Guest Phone Features

- . *Voice Guided Guest Features*
 - Play Message
 - Automatic Wake Up
 - Do Not Disturb
 - Password Control
- . Handle Call: Intercom & Outside Line
- . Set Room Status by Hotel Staff
- . *AH99p only features*
 - Be-paged capability
 - Message Indication
 - Hook Delay
 - 10 single buttons speed dial (Non-volatile storage)
 - Speakerphone
 - Adjustable Flash timing
 - Adjustable Ring Volume

Hotel Key Features - 2

Suite Service

- . Multi-extension with one extension number
- . Multi-extension with one billing account
- . Multi-extension with one Mailbox
- . Multi-extension with one Caller ID
- . Multi-extension with one DSS indication
- . Multi-extension with one Check In/Out
- . Multi-extension with one Room Status

Property Management Interface

- . PMS Micros Opera/Opera Express/Fidelio
- . PMS Mitel Emulation
- . PMS link: RS232 or Ethernet link
- . SMDR format: Separate / Integrated with PMS

Property Management Features

- . Check In and Check Out
- . Guest Room Status (Clean, Not Clean, Vacancy, etc..)
- . Guest Voice Mail Status/ Message Waiting
- . Guest Name displayed on the DK phone
- . Wake Up Service
- . Telephone Call Accounting Information (SMDR)
- . *Micros Opera/Opera Express/Fidelio Only*
 - Guest Room Move
 - Room DND Status
 - Room mini-bar POS (Point of Sale) Information

Call Accounting

- . SMDR direct print out
- . Embedded Billing application
- . Call Credit Limit

Automated Attendant

- . Day Greeting
- . Night Greeting
- . Lunch Greeting
- . Holiday Greeting
- . Multi-Language

Voice Mail

- . Guest Mailbox
- . Admin Mailbox
- . Auto Erase when new guest Check in
- . Voice Mail to Email
- . Message Lamp

Hotel Key Features - 3

Wake Up Call

- . Auto Wake up
- . Auto Wake up call history and print out
- . Custom wake up call message
- . 3 Wake Up Attempts
- . Operator Notification of unsuccessful Wake Up Attempt

Emergency Services Features

- . Emergency Evacuation
- . E-911 Bumping
- . E-911 Call Handling
- . Guest Name Identification

Mobile Staff

- . Integrated Walkie-Talkie radio phone
- . Integrated DECT phone
- . Integrated WiFi phone (AtPhone)
- . Operator Classed Mobile Telephones

Additional Hotel Features

- . Voice Messaging
- . Message Waiting
- . Do Not Disturb
- . Do Not Disturb - override
- . Least Cost Routing
- . Toll Control
- . Password Control
- . Single Digit Dialing
- . Room Status
- . Flexible Numbering Plan
- . Custom Messages on Hold
- . Custom Voice Message
- . Room to Room Dialing Control
- . Elevator Phones
- . Calling Room Display
- . Automatic Day & Night Switching

DK Phone Features - 1

Key and LED Indication

- . DSS (Direct Station Selection): Trunk/Station
- . BLF (Busy Lamp Field): Trunk/Station
- . Programmable Function Keys: Hotel, VM,
- . Message Waiting Lamp
- . Incoming Ring Indication
- . Hold
- . Transfer : Blind / Screen
- . Conference
- . DND
- . Messaging
- . Message Waiting Indication
- . Trunk Queuing
- . Voice Mail
- . Call Forwarding and Indication
- . Call Split
- . Camp On
- . I Hold indication
- . I Use indication
-Much more

LCD Display

- . Characters: 16x2, 16x4, 20x2, 20x8
- . Date & Time
- . Call Duration
- . Camp on Message
- . DND status
- . Dialed Digits Display
- . Caller ID: Number and Name
- . Call History
- . Voice Mail Status
- . System Status: Lunch, Night,...
- . Extension Number and Name
-Much more

DK Phone Features - 2

Reminder

- . Busy Remind
- . Camp on Remind
- . DND Remind
- . Handset not in cradle
- . Auto Call Back

Voice

- . Handsfree Speakerphone
- . Auto Handsfree answering back
- . Back Ground Music
- . Paging
- . Be-paged
- . Group Listening
- . Headset Jack (Standard)
- . Bluetooth Headset capability
- . Intercom Voice Announce

Dial

- . Last number Redial
- . Smart Redial for Accessing external PABX
- . Dial by Name
 - Dial Mode selection (DP/DTMF)
- . Personal Speed Dial
- . System Speed Dial
- . Telephone Directory
- . Headset Mode operation
- . QuiDial - Call handle by iPhone
- . Web Console - Call handled by PC

Specifications

Mechanical Specifications							
		mm: Millimeter			in: Inch		
Model Name	Description	Width	Height	Depth	Width	Height	Depth
G2-EMD80/TDS80	Expansion Modular Device - 80 ports	357	436	126	14.1	17.2	4.96
G2-MMD40/TDS40	Master Modular Device- 40 ports	272	370	128	10.71	14.57	5.04
G2-MMD1280	Master Modular Device- 1280 ports	410	440	108	16.14	17.32	4.25
BBox0	Battery Pack Box without Battery	330	118	82	12.99	4.65	3.23
Environmental Specifications							
	Operation Conditions	Storage Conditions					
Temperature	0 to 45 degree C (32 to 113 degree F)	-40 to 66 degree C (-40 to 150 degree F)					
Humidity	10 to 95% relative Non-condensing	10 to 95% relative Non-condensing					
Maximum Loop Resistance / Impedance		26 AWG		24 AWG			
DK Phone (from STU card to the phone)		300 meters / 984 feet		500 meters / 1640 feet			
Single Line Telephone (from SLU to the phone)		800 meters / 2624 feet		1800 meters / 5900 feet			
Nurse Call Device (from STU to NCD)		300 meters / 984 feet		500 meters / 1640 feet			
Access Control Door Phone (from STU to the phone)		300 meters / 984 feet		500 meters / 1640 feet			
Internal Relay Contacts							
Type		SPST					
Rating		1 Amp. 24Vdc					
Function		Door Switch, Music on Hold switch, etc.					
Cable Requirements							
CO/ PABX Line		Twisted 1 pair (2 wires)					
IP Trunk, IP Phone		Cat. 5 cable (8 wires)					
T1/E1, ISDN BRI, ISDN PRI		Twisted 2 pair (4 wires)					
DK phone, SLT, NCD, NCD2, ACP,		Twisted 1 pair (2 wires)					
NCD to NCP, NCD2 to NCP		Twisted 1 pair (2 wires)					

System Capacities

Station Capacities

	TDS40	TDS64	TDS80	TDS160	TDS320	TDS640	TDS1280	TDS2560	TDS3840
Cabinets	1	1	1	2	4	8	16	32	64
Max. Station Slots	4	6	10	20	40	40	160	320	640
Max. Stations	32	48	80	160	320	640	1280	2528	3744
Max. DK Ports	32	48	80	160	320	640	1280	2528	3744
Max. SLT Ports	32	48	80	160	320	640	1280	2528	3744
Max. IP Phones	96	144	160	160	320	640	1280	2528	3744

Note:

- 1) DK port is for DK telephone, DK Access Phone, DK-NCD,DK- NCD2 and any future DK device.
- 2) TDS2560 is to tie two TDS1280 system together through IP Tie-Trunk (one 16 both-way links per system)
- 3) TDS3840 is to tie three TDS1280 system together through IP Tie-Trunk (two 16 both-way links per system)
- 4) ISU16M48 occupies two Station Slots although it is one card physically

Trunking and Outside Lines

	TDS40	TDS64	TDS80	TDS160	TDS320	TDS640	TDS1280	TDS2560	TDS3840
Cabinets	1	1	1	2	4	8	16	32	64
Max.Trunk Slots	2	4	5	10	20	40	80	160	320
Max. CO Lines	16	32	40	80	160	320	500	1000	1500
Max. T1	24	24	24	48	96	192	384	720	1392
Max. E1	30	30	30	60	120	240	480	900	1500
Max. PRI T1	23	23	23	46	92	184	368	690	1334
Max. PRI E1	30	30	30	60	120	240	480	900	1500
PRI T1 & CO lines	32	40	48	96	192	384	500	1000	1500
PRI E1 & CO lines	38	46	54	108	216	432	500	1000	1500
Max. IP Trunks	32	32	48	96	192	384	500	1000	1500

Parts List

Main Equipment Cabinet Parts & Assemblies

Model Name	Description
System Modules	
G2-MMD40/TDS40	Master Device 40 port cabinet for 40+ ports (Includes: 40 port cabinet - 2 trunk/4 stations slots, MPU2,IPU,MSU)
G2-MMD64/TDS64	Master Device 64 port cabinet for 64+ ports (Includes: 64 port cabinet - 4 trunk/6 stations slots, MPU2,IPU,MSU)
G2-MMD160/TDS160	Master Device 80 port cabinet for 160 ports (Includes: 80 port cabinet , MPU2, IPU, MSU, IXU)
G2-MMD320/TDS320	Master Device 80 port cabinet for 320 ports (Includes: 80 port cabinet , MPU4, IPU, MSU, IXU, MXU4)
G2-MMD640/TDS640	Master Device 80 port cabinet for 640 ports (Includes: 80 port cabinet , MPU8, IPU, MSU, IXU, MXU8)
G2-MMD1280/TDS1280	Master Device cabinet for 1280 ports (Includes: Redundancy cabinet, MPU16, PWU16)
G2-MD1280RP	Redundancy Pack for G2-MMD1280 (includes: MPU16, PWU16)
G2-EMD80	Expansion Modular Device (Includes: 80 port cabinet, IPU, IXU)
Processor Units	
G2-MPUN2	Main Processor Unit for up to 160 port system
G2-MPUN4	Main Processor Unit for up to 320 port system
G2-MPUN8	Main Processor Unit for up to 640 port system
G2-MXU4	Multiple Exchange Unit for 320 port system - Expansion for Data stream
G2-MXU8	Multiple Exchange Unit for 640 port system - Expansion for Data stream
G2-IPU2	Interface Processing Unit for 80 port cabinet
G2-IXU	Interface Auxiliary Unit for 80 port cabinet - Expansion for PCM stream
G2-MSU	Multi-Service Unit: Paging, Relay, Sensor, RS232, RTC, MOH.
Trunk Units	
G2-TKU	Trunk Unit: 4 CO lines
G2-CIC	Dual mode (FSK/DTMF) Caller ID decoder card for 4 ports
G1-MDC	4 channel Metering Card for G2-TKU - 12/16 KHz
G2-TKU2	Trunk Unit: 8 CO lines
G2-CIC2	Dual mode (FSK/DTMF) Caller ID decoder card for 8 ports
G2-SIU3	ISDN (BRI) Unit: 3 ports / 6 channels.
G2-PIU	Primary combo Unit for T1 or E1 or ISDN PRI
G2-GTU	Ground Start Trunk Unit: 4 channels
G2-EMU	E&M Trunk Unit: 4 channels
G2-IDU	DID Trunk Unit: 4 channels
G2-ITU4	IP Trunk Unit: 4 channels
G2-ITU8	IP Trunk Unit: 8 channels
G2-ITU16	IP Trunk Unit: 16 channels
G2-RTU	Radio Trunk Unit: 4 channels (Walkie-Talkie Station)
Station Units	
G2-STU2	Station Unit: 8 DK device ports
G2-HSU26	Hybrid Station Unit: 2 DK device and 6 SLT ports
G2-HSU44	Hybrid Station Unit: 4 DK device and 4 SLT ports
G2-SLU2	SLT Unit: 8 SLT phone ports
G2-ISU4	IP Station Unit: 4 channles. Support IP38, IP37, IP39 series and standard SIP IP phone
G2-ISU8	IP Station Unit: 8 channles. Support IP38, IP37, IP39 series and standard SIP IP phone
G2-ISU16	IP Station Unit: 16 channles. Support IP38, IP37, IP39 series and standard SIP IP phone
G2-ISU8M24	IP Station Unit: 8 common Ch. for 24 Registered IP phones. Support IP37, IP39 and standard SIP phone
G2-ISU16M48	IP Station Unit: 16 common Ch. for 48 Registered IP phones. Support IP37, IP39 and standard SIP phone
Voice Service Unit	
G2-VMU2-1G	Voice Mail Unit: 8 Ch. Auto Attendant and 4 Ch. Voice Mail with 30 hours voice storage.
G2-AMS4-8G	Advanced Messaging System: 4 Ch. AA/Voice Mail/IVR/UMS and on line recording - 250 hours storage
G2-AMS8-8G	Advanced Messaging System: 8 Ch. AA/Voice Mail/IVR/UMS and on line recording - 250 hours storage
Bluebox Server	
BB500-Office	Stand-alone Server with build-in applications: Web Console, QuiDial, Access Control
BB500-Hotel	Stand-alone Server with build-in applications: Web Console, Access Control
BB500-NCS	Stand-alone Server with build-in applications: Access Control, Nurse Call System
Others	
G2-PSU	Power Supply with Battery Charger for one G2-EMD80
G2-PWU40	Power Supply with Battery Charger for one G2-MMD40
BBOX0	Battery Box without Batteries: Case for two 12Vdc/7.2AH batteries to build 24Vdc/7.2AH capacity
BBOX1	Battery Box with Batteries: Includes two 12Vdc/7.2AH batteries to build 24Vdc/7.2AH capacity
PX-Card	RF Proximity Card for Access Control Phone
G2-RMK-19	19" Rack mount Kit
DDK Pack-100	DDK Connectors - 100 pcs / pack









Telephone Sets & Peripheral Devices

Model Name	Description
DK Phones	
DK2-22D	DK2 Keyphone- 22 DSS Keys, 16x4 LCD, Headet Interface
DK2-DSS	DK2 DSS Console- 66 DSS Keys
DK3-10D	DK3 Keyphone- 10 DSS Keys, 16x2 LCD
DK6-36D	DK6 Keyphone- 36 DSS Keys, 16x2 LCD
DK6-36DBT	DK6 Keyphone- 36 DSS Keys, 16x2 LCD, Bluetooth Interface
DK6-DSS	DK6 DSS Console- 60 DSS Keys
DK6-18D	DK6 Keyphone- 18 DSS Keys, 16x2 LCD
DK7-10D	DK7 Keyphone- 10 DSS Keys, 16x2 LCD
DK9-15D	DK9 Keyphone- 15 DSS Keys, 20x2 LCD
DK9-25D	DK9 Keyphone- 25 DSS Keys, 30x8 LCD
DK9-DSS	DK9 DSS Console- 30 DSS Keys with 4 group switches to check 120 extensions status
Access Control Phones	
DK-ACP40/RFID	Access Control Door Phone - 4x4 touch keys, 16x2 OLED, 2 Relay, 1 Sensor, RFID Reader
DK-ACP30/D	Access Control Door Phone - 1 touch keys, 2 Relay, 1 Sensor
DK-ACP30/RFID	Access Control Door Phone - 1 touch keys, 2 Relay, 1 Sensor, RFID Reader
DK-LMS	DK Lift phone
Nurse Call Device	
DK-NCD	DK Nurse Call Device- speakerphone, Relay, Call/Cancel button, Call Cord Jack. I/O interface
DK-NCD2	DK Nurse Call Device- speakerphone, Relay, Call/Cancel button, Call Cord Jack. RS485 interface
Nurse Call Panel	
NCD-NCP-PC	Nurse Call Panel - Patient Call
NCD-NCP-EC	Nurse Call Panel - Emergency Call
NCD-NCP-NP	Nurse Call Panel - Nurse Presence
NCD-NCP-BE	Nurse Call Panel - Bathroom Emergency Call
NCD-NCP-BW	Nurse Call Panel - Bed Exit & Wet detector
NCD-NCP-SC	Nurse Call Panel - Staff Call
Nurse Call Others	
NCD-NLD3	Lamp Relay Device - 3 Relays
NCP-IO	8 DI (sensor) and 4 DO (Relay)
NCD-CL	Corridor Light (work with NCD2)
NCD-PD	Power Adaptor (work with NCD2)
NCP-CC	Call Cord of Patient Call (work with NCD-NCP-PC)
NCP-BSP	Bed exit sensor pad (work with NCD-NCP-BW)
BB-CSD	Corridor Moving LED Display Panel - Single side
BB-CDD	Corridor Moving LED Display Panel - Double side
Be-paged SLT	
AH99p	Be-paged SLT, Message Lamp, 10 Speed Dial Keys (non-volatile memory), Hook Delay features
SIP Phone	
IP3731	SIP IP Phone - 10 DSS Key, 16x2 LCD (DK3 style)
IP3762	SIP IP Phone - 18 DSS Key, 16x2 LCD (DK6 style)
IP3761	SIP IP Phone - 36 DSS Key, 16x2 LCD (DK6 style)
SIP Key Phone	
IP3861	IP Keyphone - 36 DSS Keys, 16x2 LCD (DK6 style)
IP Smart Phone	
IP3980	IP Smart Desk Top Phone - 7" Touch Color LCD, Android OS. Docking for telephone
IP3971	IP Smart Wall Mount Phone - 7" Touch Color LCD, speakerphone. RS485. Optional SLT,WiFi interface
IP3964	IP Video Door Phone - Large size, 16x2 OLED, 4x4 piezo key, RFID reader
IP3963	IP Video Door Phone - Medium size, 4x4 piezo key, RFID reader
IP3962	IP Video Door Phone - Small size, one touch key, RFID reader
IP3940C	IP Video Door Phone - 16x2 OLED, 4x4 piezo key
IP3940AC	IP Video Door Phone - 16x2 OLED, 4x4 touch key, RFID reader
Smart Phone Application Software	
AtPhone	Application of iPhone -SIP phone, 20 DSS keys, License Messaging features
QuitDial	Application of iPhone -Quick Dial for assigned DK phone














Parts Reference Photos

Main Equipment Cabinet & Common Control









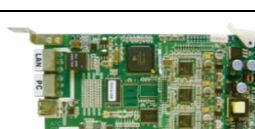
Model Name	Description	Reference Photos
System Modules		
G2-MMD40/TDS40	Master Device 40 port cabine for 40+ ports (Includes: 40 port cabinet - 2 trunk/4 stations slots, MPU2, IPU, MSU)	
G2-MMD160/TDS160	Master Device 80 port cabinet for 160 ports (Includes: 80 port cabinet , MPU2, IPU, MSU, IXU)	
G2-MMD320/TDS320	Master Device 80 port cabinet for 320 ports (Includes: 80 port cabinet , MPU4, IPU, MSU, IXU, MXU4)	
G2-MMD640/TDS640	Master Device 80 port cabinet for 640 ports (Includes: 80 port cabinet , MPU8, IPU, MSU, IXU, MXU8)	
G2-MMD1280/TDS1280	Master Device cabinet for 1280 ports (Includes: Redundancy cabinet, MPU16, PWU16)	
G2-MD1280RP	Redundancy Pack for G2-MMD1280 (includes: MPU16, PWU16)	
G2-EMD80/TDS80	Expansion Modular Device (Includes: 80 port cabinet, IPU, IXU)	

Model Name	Description	Reference Photos
Processor Units		
G2-MPUN2	Main Process Unit for up to 160 ports system	
G2-MPUN4	Main Process Unit for up to 320 ports system	
G2-MPUN8	Main Process Unit for up to 640 ports system	
G2-MXU4	Multiple Exchange Unit for 320 ports system - Expansion for Data stream	
G2-MXU8	Multiple Exchange Unit for 640 ports system - Expansion for Data stream	
G2-IPU2	Interface Processing Unit for 80 port cabinet	
G2-IXU	Interface Auxiliary Unit for 80 ports cabinet - Expansion for PCM stream	
G2-MSU	Multi-Service Unit: Paging, Relay, Sensor, RS232, RTC, MOH.	













Trunk Interface

Model Name	Description	Reference Photos
Trunk Units		
G2-TKU	Trunk Unit: 4 CO lines	
G2-CIC	Dual mode (FSK/DTMF) Caller ID decoder card for 4 ports	
G2-TKU2	Trunk Unit: 8 CO lines	
G2-CIC2	Dual mode (FSK/DTMF) Caller ID decoder card for 8 ports	
G2-SIU3	ISDN (BRI) Unit: 3 ports / 6 channels.	
G2-PIU	Primary combo Unit for T1 or E1 or ISDN PRI	
G2-GTU	Ground Start Trunk Unit: 4 channels	
G2-EMU	E&M Trunk Unit: 4 channels	
G2-IDU	DID Trunk Unit: 4 channels	
G2-ITU4	IP Trunk Unit: 4 channels	
G2-ITU8	IP Trunk Unit: 8 channels	
G2-ITU16	IP Trunk Unit: 16 channels	
G2-RTU	Radio Trunk Unit: 4 channels (Walkie-Talkie Station)	

Station Interface





Model Name	Description	Reference Photos
Station Units		
G2-STU2	Station Unit: 8 DK device ports	
G2-HSU26	Hybrid Station Unit: 2 DK device and 6 SLT ports	
G2-HSU44	Hybrid Station Unit: 4 DK device and 4 SLT ports	
G2-SLU2	SLT Unit: 8 SLT phone ports	
G2-ISU4	IP Station Unit: 4 channles. Support IP38, IP37, IP39 series and standard SIP IP phone	
G2-ISU8	IP Station Unit: 8 channles. Support IP38, IP37, IP39 series and standard SIP IP phone	
G2-ISU16	IP Station Unit: 16 channles. Support IP38, IP37, IP39 series and standard SIP IP phone	
G2-ISU8M24	IP Station Unit: 8 common Ch. for 24 Registered IP phones. Support IP37, IP39 and standard SIP phone	
G2-ISU16M48	IP Station Unit: 16 common Ch. for 48 Registered IP phones. Support IP37, IP39 and standard SIP phone	

Service Units and Others





Model Name	Description	Reference Photos
Voice Service Unit		
G2-VMU2-1G	Voice Mail Unit: 8 Ch. Auto Attendant and 4 Ch. Voice Mail with 30 hours voice storage.	
G2-AMS4-8G	Advanced Messaging System: 4 Ch. AA/Voice Mail/IVR/UMS and on line recording - 250 hours storage	
G2-AMS8-8G	Advanced Messaging System: 8 Ch. AA/Voice Mail/IVR/UMS and on line recording - 250 hours storage	
Bluebox Server		
BB500-Office	Stand-alone Server with build-in applications: Web Console, QuiDial, Access Control	
BB500-Hotel	Stand-alone Server with build-in applications: Web Console, Access Control	
BB500-NCS	Stand-alone Server with build-in applications: Access Control, Nurse Call System	
Other Items		
G2-PSU	Power Supply with Battery Charger for one G2-EMD80	
G2-PSU40	Power Supply with Battery Charger for one G2-MMD40	
BBOX0	Battery Box without Batteries: Case for two 12Vdc/7.2AH batteries to build 24Vdc/7.2AH capacity	
BBOX1	Battery Box without Batteries: Case for two 12Vdc/7.2AH batteries to build 24Vdc/7.2AH capacity	
G2-RMK-19	19" Rack mount Kit	
DDK Pack-100	DDK Connectors - 100 pcs / pack	

Telephone Sets

Model Name	Description	Reference Photos
DK Phones		
DK2-22D	DK2 Keyphone- 10 DSS Keys, 16x4 LCD, Headset Interface	
DK2-DSS	DK2 DSS Console- 66 DSS Keys	
DK2-22D + DK2-DSS		
DK3-10D	DK2 Keyphone- 22 DSS Keys, 16x2 LCD	
DK6-36D	DK6 Keyphone- 36 DSS Keys, 16x2 LCD	
DK6-36DBT	DK6 Keyphone- 36 DSS Keys, 16x2 LCD, Bluetooth Interface	
DK6-DSS	DK6 DSS Console- 60 DSS Keys	
DK6-18D	DK6 Keyphone- 12 DSS Keys, 16x2 LCD	
DK7-10D	DK7 Keyphone- 10 DSS Keys, 16x2 LCD	

Model Name	Description	Reference Photos
DK Phones		
DK9-15D	DK9 Keyphone- 15 DSS Keys, 20x2 LCD	
DK9-25D	DK9 Keyphone- 25 DSS Keys, 20x8 LCD	
DK9-DSS	DK9 DSS Console- 30 DSS Keys with 4 group switches to check 120 extensions status	
DK9-25 + DK9-DSS		



Access Control Phones

Model Name	Description	Reference Photos
Access Control Phones		
ACP40/RFID	Access Control Door Phone - 4x4 touch keys, 16x2 OLED, 2 Relay, 1 Sensor, RFID Reader	
ACP30/D	Access Control Door Phone - 1 touch keys, 2 Relay, 1 Sensor	
ACP30/RFID	Access Control Door Phone - 1 touch keys, 2 Relay, 1 Sensor, RFID Reader	
DK-LMS	DK Lift phone	


Nurse Call Devices, Panels & Others

Model Name	Description	Reference Photos
Nurse Call Device		
DK-NCD2	DK Nurse Call Device-speakerphone, Relay, Call/Cancel button, Call Cord Jack. RS485 interface	
Nurse Call Panel		
NCD-NCP-PC	Nurse Call Panel - Patient Call	
NCD-NCP-EC	Nurse Call Panel - Emergency Call	
NCD-NCP-NP	Nurse Call Panel - Nurse Presence	
NCD-NCP-BE	Nurse Call Panel - Bathroom Emergency Call	
NCD-NCP-BW	Nurse Call Panel - Bed Exit & Wet detector	
NCD-NCP-SC	Nurse Call Panel - Staff Call	
Nurse Call Others		
NCD-NLD3	Lamp Relay Device - 3 Relays	
NCP-IO	8 DI (sensor) and 4 DO (Relay)	
NCD-CL	Corridor Light (work with NCD2)	
NCD-PD	Power Adaptor (work with NCD2)	
NCP-CC	Call Cord of Patient Call (work with NCD-NCP-PC)	
NCP-BSP	Bed exit sensor pad (work with NCD-NCP-BW)	
BB-CSD	Corridor Moving LED Display Panel - Single side	
BB-CDD	Corridor Moving LED Display Panel - Double side	










IP Phones

Model Name	Description	Reference Photos
SIP Phone		
IP3731	SIP IP Phone - 10 DSS Key, 16x2 LCD (DK3 style)	
IP3762	SIP IP Phone - 18 DSS Key, 16x2 LCD (DK6 style)	
IP3761	SIP IP Phone - 36 DSS Key, 16x2 LCD	
SIP Key Phone		
IP3861	IP Keyphone - 36 DSS Keys, 16x2 LCD	

Be-Paged SLT

Model Name	Description	Reference Photos
Be-paged SLT		
AH99p	Be-paged SLT, Message Lamp, 10 Speed Dial Keys (non-volatile memory), Hook Delay features	

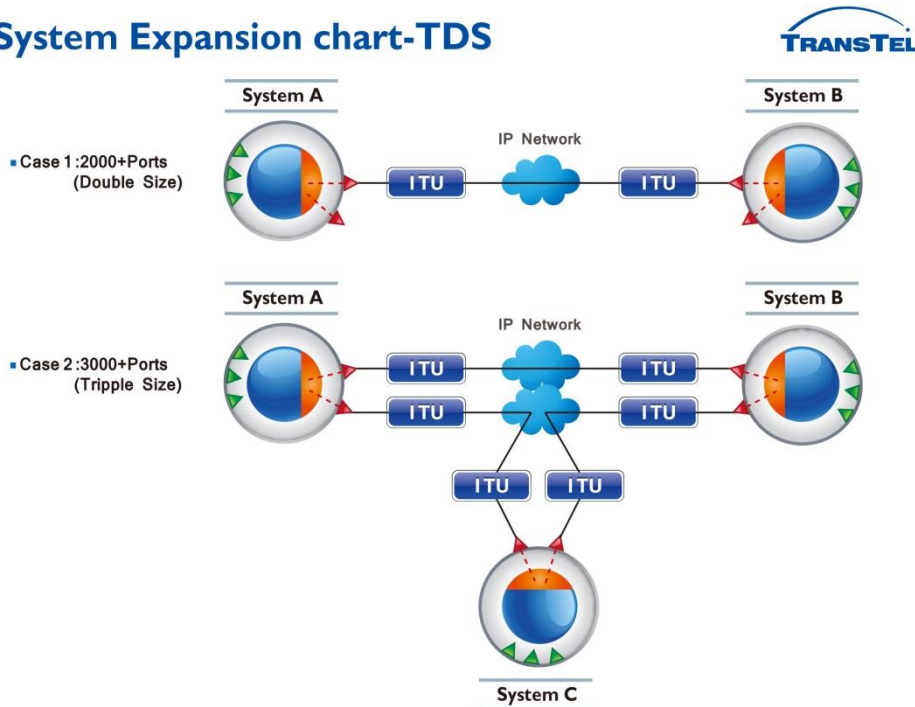
IP Smart Phone

Model Name	Description	Reference Photos
IP Smart Phone		
IP3980	IP Smart Desk Top Phone - 7" Touch Color LCD, Android OS. Docking for telephone	
IP3971	IP Smart Wall Mount Phone - 7" Touch Color LCD, speakerphone, RS485. Optional SLT,WiFi interface	
IP3964	IP Video Door Phone - Large size, 16x2 OLED, 4x4 piezo key, RFID reader	
IP3963	IP Video Door Phone - Medium size, 4x4 piezo key, RFID reader	
IP3962	IP Video Door Phone - Small size, one touch key, RFID reader	
IP3940C	IP Video Door Phone - 16x2 OLED, 4x4 piezo key	
IP3940AC	IP Video Door Phone - 16x2 OLED, 4x4 touch key, RFID reader	
Smart Phone Application Software		
AtPhone	Application of iPhone -SIP phone, 20 DSS keys, License Messaging features	
QuitDial	Application of iPhone - Quick Dial for assigned DK phone	

TDS System Expansion to 3000 ports

Although TDS is a 1280 port large size system, it still can be expanded easily by Transtel special IP tie-trunk technology to increase the port up to 3000+ ports.

System Expansion chart-TDS



Case 1: 2000+ ports

Both System A and B need a dedicated ITU (IP Trunk Unit: 16 both ways tie-trunk port) to link together.

Case 2: 3000+ ports

All System A/B/C need two dedicated ITUs to link with dedicated System.

All extension number in each system has their SAC (Site Access Code. example: System A=1, System B=2, System C=3). Any extensions in any system (A or B or C) dial the full extension number (with SAC) will call the right person. If the called party is not located at same system as the calling party, system will auto route the call through the dedicated ITU to the right destination. Not only make the Intercom like one system, people can Hold the incoming call and transfer to any extension among two or systems with the same operation as single system.

The IP network can be local LAN or Internet. The link path between systems is flexible; one ITU can handle 16 ports max. If need more paths, just install extra ITU.

The TDS is simple, low cost yet high performance IP hybrid communication system.