GDS

Global Digital System

64 TO
640 PORTS

The Wise Investment Choice

GDS - The platform for today and tomorrow

GDS (Global Digital System) is a feature-rich platform that meets existing telecommunication requirements and offers future-proof migration solutions. The system provides external interfaces to PSTN, ISDN (BRI, PRI), E1/T1, DID, E&M and VoIP via the Internet, along with feature-packed digital keyphones, traditional analog and wireless-handsets. The GDS Series integrates seamlessly with many application programs to diversify itself to an advanced Communication System Platform. The versatility of the GDS System permits it to adapt to future Internet-enabled technology for Voice, Data and Security applications. This integrated IP-based capability protects your investment and ensures a wide range of options for expanding your information and communication infrastructure as your business grows.

Teamwork makes the difference

IP-CTI (IP-based Computer Telephony Integration) technology

Intranet and Internet are utilized more than ever and will soon be a standard media for the exchange of information. With GDS CT Star software, bundling many applications, to streamline team processes and raise productivity is a reality.

With IP Connectivity, users can retrieve their Voice Messages from their own desk or wherever they are. Check your colleague's attendance status and his or her absent message, leaving and reviewing your messages, monitoring company call traffic and total call cost on line. GDS give your team members many imaginative ideas to work with.

Leverage the cost, quality and security

LCR (Least Cost Routing) with VoIP (Voice over IP)

GDS always switches calls via the least costly route. A sophisticated and flexible least-cost routing system ensures that all calls are made at the most economic rate, producing substantial savings on long distance charges. This is the most cost effective factor whenever there is more than one carrier or service provider available.

The entire LCR set up or changes may be administered remotely by modem or Internet connection, assuring quick response time from authorized dealers.

VoIP is an emerging technology for the processing of voice traffic. While the universal availability of IP connections is underway and improvements continue as far as quality of service is concerned, your GDS System will support both traditional voice grade lines and also IP type connections, giving you peace of mind in the event Internet traffic becomes unreliable. With the GDS built-in VoIP and PSTN interface, you choose the best route when needed. This is not possible for IP-only switching systems as they lack PSTN line capability, thus there is no way to switch to normal telephone lines and call out for help or receive incoming calls when internet access is lost.

Access Control and Security

Voice Integrated with Internet Access

Thanks to the GDS's Digital Twin port technology - Power, Voice, Data and Image information can all coexist on a normal twisted cable. Many new devices, ACP (Access Control Phone), Image Capturer and LCD Image Monitor, are being adopted to the access and security environment. There is no requirement for separate cabling, battery backup and different system installation and maintenance expenditure. The GDS gives you one solution for all.

With the Internet connection, the Images and Sensor alarm signal can be sent out to your specified location. The GDS also can notify your mobile phone with its built-in voice message and let you immediately monitor the environment by pressing just a few buttons.

Make sure you have

The Companion Software

### CT Star - The Internet-based software package

CT Star is a software package containing multiple applications. The most important and advanced feature is " Every application is Internet-based design" - You can access your data from anywhere via an Internet connection. It is particularly useful for maintenance or servicing. The service center can access your data with your permission and then check your settings, and tune your configuration immediately.

SM (System Manager)

This application provides detailed information of all the programming settings in the GDS. It offers a Wizard-like function to sort out all parameters related to specific applications, so technicians can click the required item to check, modify and then update directly to the GDS. The software is packaged with the system for Remote Programming and Maintenance purposes. When the customer needs programming changes, the technician can remotely modify the GDS's settings via Modem or Internet connections, thus providing the best and quickest service for the customer.

AM (Access Manager)

This application is designed to configure the operation of the Access Control Phone and it's related functions. It offers Proximity card registering, assigns access capability - time schedule and which door can be accessed for each card holder, the name of each door plus monitoring the access status of the system. It also can be used to email a regular report to a specific person or the Administration Center within the organization. When needed, it can be used to trace what time, which door was accessed by which card's holder.
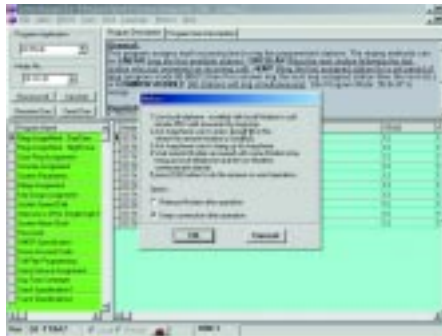
CAS (Call Accounting System)

This software is particularly useful for legal, telemarketing, call center and other consulting businesses. Call Accounting is a feature that allows you to record Account Numbers as calls are made or received. Through these account numbers, call costs, plus your service rate, can be allocated to nominated clients or cost centers within your organization to accurately track telephone-related expenditures or for billing purposes.

To meet the new demand for different carriers, 10 carriers maximum can be assigned by their unique leading digits, so CAS can tell you which carrier has been used for individual calls.

CM (Contact Manager)

This application is dedicated to allow all users the capability to utilize Computer Telephony features with the GDS. It offers PC phone type functions- place call, answer call, transfer, hold, queue for lines and more. Short Message is a handy tool that you can use to send or receive short messages with your colleagues. Screen pop is a must have feature working together with Caller ID. Call History let you recall someone who has just been called, Missed Call let you call back missed calls when you return to your desk. Name Dialing is available for Intercom and outside calls. Extension information lets you see the called party's absent message and current call status. Phonebook for Public- common speed dial for system wide use or Phonebook for Private- your personal contacts information. All the above information is stored on the server, so you can use any PC to login with your name and password and then access your private phonebook. The Private Contact information can be imported from MicroSoft "Outlook", so, you don't need to re-type it.
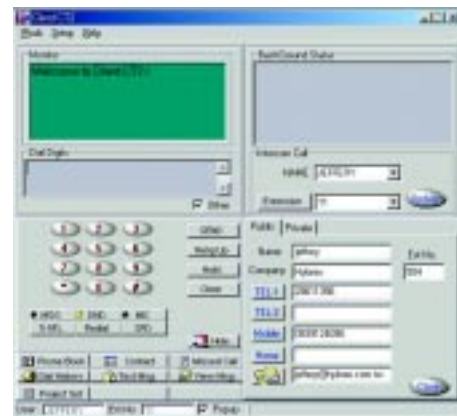
Features you should compare with....

ISDN Connectivity (BRI and PRI)

ISDN has been proven as the way of the future for many office applications and can give real benefits to your business:

Sound quality improved through digital voice transmission.

Multimedia access using voice and data transmission.

ISDN will also provide you with additional benefits:

MSN (Multiple Subscriber Number) or **DID** (Direct In ward Dial)- allowing incoming callers direct access to extensions, without going through the switchboard.

Caller ID (Calling Line Identification) - allowing you to identify the originating number of incoming calls from the ISDN network.

AOC (Advice of Charge) - at the end of each call, your phone display will show the exact call cost (subject to network provider)

DIA (Direct Internet Access) capability

The GDS Built-in **LAN Management Unit**, provides a powerful path for accessing the database of the KSU via IP addressing, exchange data and commands from an external **CT server**, send a Voicemail to your Mailbox to fulfill the **UMS** (Unified Messaging) requirement. Although the GDS has a high speed (56K maximum) COM port to communicate with external devices, this LAN interface (10/100Base T - dual/fast Ethernet) is dedicated for the higher speed required in some advanced features, such as Voice Messaging and Image transfer.

This **DIA** capability also enhances customer service. The service center can handle inquiries or requests faster, more efficiently, and more cost-effectively

Built-in Auto Attendant and Voicemail

Auto Attendant and Voicemail are practical commodities for all modern communication systems. But external devices can give Slow Response Time for handling of incoming calls. The GDS built-in Auto Attendant and Voicemail knows all station status without the checking procedure required by external devices, that is why the GDS can react quickly to serve your customers more efficiently. Being built into the KSU, it can send the Voice Message to any mailbox and can be used for automatic backup purposes.

Caller ID for traditional Single line stations

CLI (Calling Line Identification) capability is a common requirement for most customers, viewing the CLI through the LCD display on the Keyphone is a good feature, but the CLI information can still be received by the CLI standand phone at the SLT (Single Line Telephone) interface. The GDS not only transfers the external CLI but also shows you which extension is calling you during intercom calls.

Message Lamp on Single Line stations

The GDS can generate industry Standard Message Waiting signals to light the Message Lamp on Single Line Telephones, ideal for the hospitality industry or for Voice Messaging applications using inexpensive analog type telephones.

Digital Twin-Port

The advanced technology combines Voice, Data, Power and Imaging into a normal twisted cable to simplify cabling and expansion. The " No Master/Slave" design can let you plug in or plug out at any Keyphone without interrupting the other.

Hybrid Phone

If you already have many contacts in your computer, then you can dial the telephone number through the normal telephone line, and then talk with him/her via your Keyphone. Then you can easily key in the account code for tracking purposes or transfer the call to colleagues. The GDS's Hybrid phone can easily accomplish this.

Other applications with the Hybrid Phone:

Opt for a cordless telephone to move around your office, yet stay in touch with customers.

Put a personal answering device on your desktop and auto forward your calls on a busy or no answer for retrieval later. With this device, you also can screen calls, answer those you want and let the device take a message for the rest.

Power failure protection

In the event of a power supply failure, the system can be configured to automatically route calls to Single Line Telephones, so that communications can continue. When the power is restored, the system will revert back to its normal connection.

Paging, Music On Hold, Background Music

The GDS allows all types of extensions to access a variety of paging types. Internal paging through the speaker of Keyphones and Access Control Phones. External paging through an external PA system. MOH (Music on Hold) to allow outside callers to listen to music when put on "Hold". The advanced Built-in Voicemail Unit can record the desired music or message for different groups of outside lines. BGM (Back Ground Music) is a benefit feature for an employee to listen to music when the Keyphone is idle.

Access Control Phone

The ACP (Access Control Phone) provides an audio path to extensions or external lines, RFID detector for proximity card, relay to open the door or activate a siren and a sensor to detect alarm status. It has many different combinations, such as a Door phone

at front or back door, normal Wall Mount Phone with Handsfree Answer Back, Two-way Speaker, Security Control Panel and Access Control Device. Many new devices are being developed - Image Capturer and LCD Imaging Monitor to work in concert with the ACP .

GDS Applications:

Multi-national Organization

VPN on VoIP - One number for all members world wide within the organization.

Call Center or CRM system

CT Star (Screen pop-up, Short Messaging, PC phone, Call Cost Control, Traffic monitoring, etc.) functions as the Communication interface to adapt many existing Call Center and CRM applications. Built-in Auto Attendant, Voicemail, IVR (Interactive Voice Response) to extend its functions.

Hotel

Offering CID, Message Lamp to the room. ACP for VIP rooms or Floor control. CT Star software for the operator to check Guest information, Room status, leave messages. ACP as a Door Phone for guests to answer the door without opening the door, Big LED Display for showing status of DND or "Clean the room" outside the door. It also controls the door to open or not, it can even notify the Guest that the door is open or closed.

Clinic or Hospital

ACP works as a Two-way speaker for nurse and patient, Patient monitoring, Doctor's Wall Mount Phone to auto answer the call without touching any buttons. ACP's RFID detector to work as Auto Call Forwarding when doctor is cruising the rooms.

System Features:

1. Account Code Capability
2. Alarm - Station
3. Answer Call Waiting
4. Automatic Answer-Intercom
5. Automatic Attendant *
6. Automatic Call Back (Camp-On)
7. Automatic Line Access
8. Automatic Redial
9. Data and Time backup without Battery
10. Day and Night Service
11. Call Waiting
12. Call Transfer
13. Call Forwarding (Follow Me)
14. Camp On
15. Conference for more parties
16. CLI on both External and Internal Call *
17. CTI Integration *
18. Check in and Check Out
19. DID Trunk *
20. Direct Call Pickup
21. Directory Dial for Speed Dial
22. Direct Inward System Access *
23. Distinctive Dial Tone and Ringing
24. Doorphone Calling and Opening *
25. Executive Override (Barge-In)
26. E & M Trunk *
27. Flash (Open Loop Timed Flash)
28. Hunt Group
29. Last Number Redial
30. Line Reverse Detection
31. Lock / Unlock Extensions
32. Multiple Music On Hold *
33. Macro Keys
34. One Touch Dialling
35. Paging / Meet-Me Page
36. Privacy Release
37. Programmable Keys
38. Security Code
39. SLT HOLD Operation
40. System Speed Dial and Personal Speed Dial
41. SMDR Buffers
42. Toll Restriction
43. Voicemail Integration *
44. Wake Up Service *

Display Features:

1. Account Code Display
2. Absent Message Display
3. Call Duration Timer
4. Call Processing Information
5. CLI or Caller ID Information *
6. Called Extension Name Display
7. Conference Information
8. Date and Time Display
9. Dialed Number
10. Call Log Information
11. System Programming
12. Enhanced Station Programming
13. Message Waiting Caller Information
14. Name of Outside Caller
15. Override Identification
16. Soft Keys

* : optional: Extra cost equipment may be required for this feature.

Specification

Maximum Ports	64	160	240	320	400	480	560	640
Cabinets	1	2	3	4	5	6	7	8
Extensions	48	160	240	320	400	480	560	640
Outside Lines	38	84	126	168	210	252	255	255
Outside Slots	4	10	15	20	25	30	35	40
PSTN Lines	16	40	60	80	100	120	140	160
ISDN BRI	6	12	18	24	30	36	42	48
ISDN PRI	1	2	3	4	5	6	7	8
T1 or E1	1	2	3	4	5	6	7	8
VoIP Slots	2	4	6	8	10	12	14	16
Keyphones	40	160	240	320	400	480	560	640
SLTs	40	160	240	320	400	480	560	640
ACPs	40	160	240	320	400	480	560	640
Voice Service slots	2	4	5	7	9	11	13	15

Note:

1. Above capacity shown as the maximum figure, due to the limitation of available slots, the exact capacity will be dependant on how many slots are available for each interface.
2. Extensions means the maximum number of extensions.
3. Outside Lines means the maximum number of outside lines, that is the combination of E1 or PRI plus ISDN, PSTN Lines.
4. Outside Slots means the available slots for PSTN, ISDN, E1/T1, VoIP.
5. One ISDN BRI has 2 outside lines
6. One ISDN PRI has 23 or 30 outside lines
7. One T1 has 24 outside lines.
8. One E1 has 30 outside lines.
9. One VoIP may have 2 to 4 channels.
10. One Voice Mail Slot may have 4 or 6 channels

DK Series

DK1-21   Handsfree, LCD Display

DK1-21H   Handsfree, Hybrid, LCD Display

DK1-22   Handsfree

DK1-33   On-hook Dialing

DK2-21   Handsfree, Large LCD Display

DK2-21H   Handsfree, Hybrid, Large LCD Display

DK-SLD   Analog Adapter for Two SLTs

DK-ACP   Access Control Phone

DK1-DSS   60 Buttons Direct Station Selection

GDS Cabinet

DK1-21 (W)
DK1-21H (W)
DK1-31 (W)

DK1-22 (W)

DK1-33 (W)

DK1-21 (B)
DK1-21H (B)
DK1-31 (B)

DK1-DSS

DK2-21 (W)
DK2-21H (W)

DK-SLD   DK-ACP