

# Samsung iDCS

– integrated communications  
for the digital business world

Integrated Communications Systems



## Integrated communications for your business

The **iDCS** range of business communication solutions from Samsung Telecoms is designed to deliver an integrated voice and data platform to medium and large-sized businesses and organisations.



Communication now means much more than making and taking calls. It is now possible to access and share voice, fax, video and data through your telephone system. Flexibility is a key feature of the **iDCS** range, offering you the benefit of a tailor-made solution to the individual needs of your business.



Incorporating Voice over Internet Protocol (VoIP) and enhanced Networking technology, **iDCS** solutions can support up to 96 ports per node, with the ability to link systems across multiple sites.

## Investing in your future

As your telephone is the key asset of your business, the **iDCS** platform has been designed to provide the power to handle any task and the flexibility to accommodate future growth.



With a comprehensive range of features and functionality, the Samsung **iDCS** offers a solution for any organisation – whether you are a business, school or college, hotel or retail outlet.

Features such as inter-site networking, ISDN, DECT, Computer Telephony Integration (CTI), call centre functionality, integral voicemail and least-cost routing bring efficiency and simplicity to all your communications needs.

## Flexibility and reliability

In addition, a wide range of ergonomic handsets is available for the **iDCS** to provide for each user's precise needs – from simple call making and receiving, to auto-callback, call forwarding and paging.

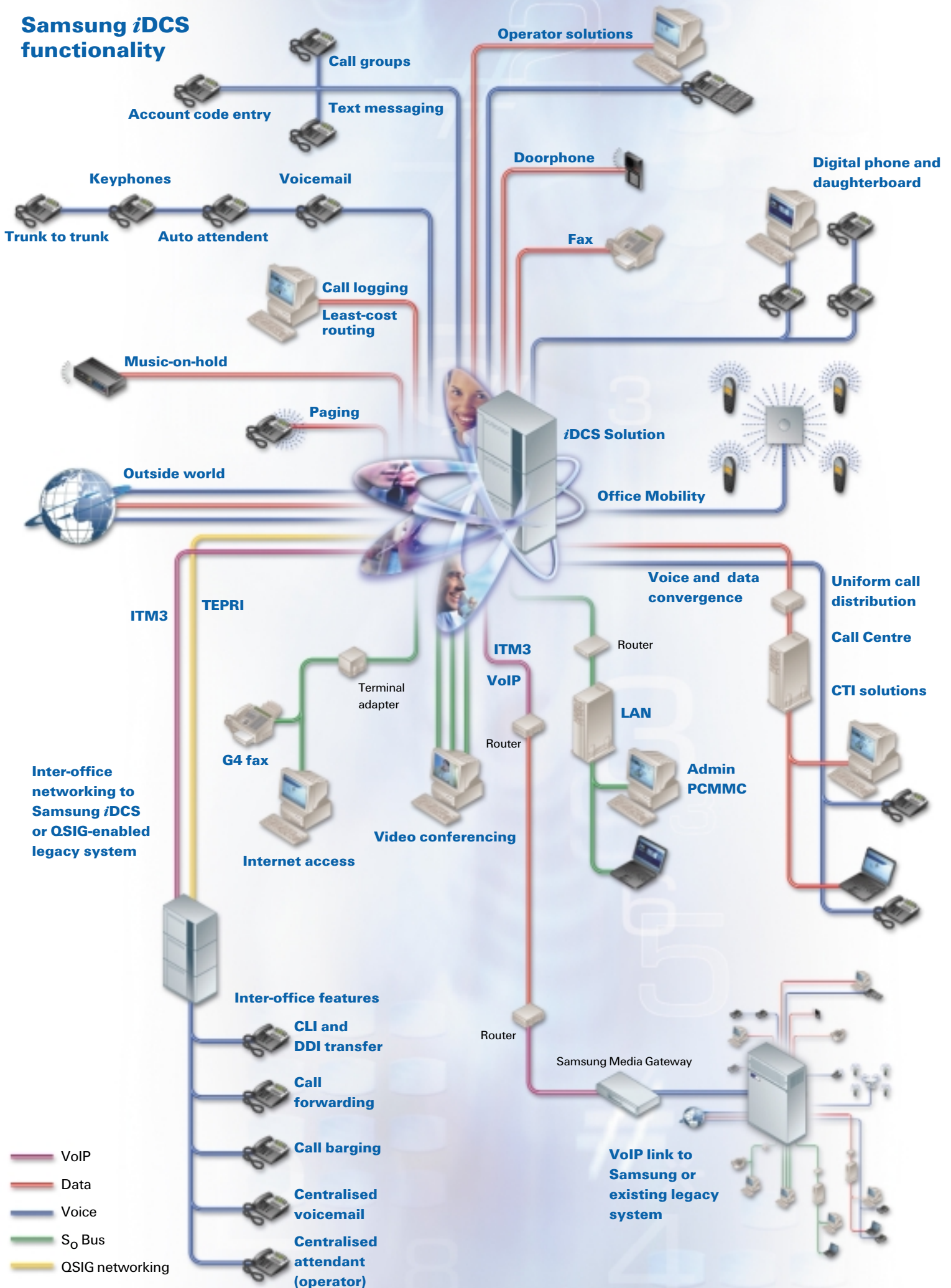
With a modular architecture and future-proof technology, giving you complete peace of mind, **iDCS** solutions can be upgraded to offer more services and more extensions as your needs evolve.

The **iDCS** platform can also ensure Samsung DCS users preserve their IT investment, as it allows a high proportion of the current hardware and handsets to be migrated into a new **iDCS** solution.

For those existing DCS users who require an increase in the capacity or services available, the **iDCS** offers an expandable solution with a wider range of features and functionality with a familiar look and feel.



# Samsung iDCS functionality



## Advanced communications at your fingertips

A host of sophisticated standard and optional features are available for the #DCS range to ensure that you maximise the potential of your communications solution. All features are simple to use – many at the touch of a button – providing users with easy access to the system's comprehensive functionality.



### Caller identification – talking numbers

Utilising the power of ISDN technology, the #DCS enables you to log and manage multiple incoming CLI and DDI numbers, and offers the opportunity to transmit or restrict the outgoing CLI of individual extensions.

As well as displaying the number of incoming callers, CLI can also associate incoming telephone numbers with names from your system's internal database so that the caller's name is displayed on the handset, enabling you always to know when your key contacts are calling. Additionally, a simple keystroke will save a caller's number so that you can easily return their call. The #DCS also allows you to review and reply to calls that you have missed.

During a call you may also add a new number to your speed dial list with scratch pad dialling. Simply enter the number and follow the on-screen prompts.

Applying DDI functionality allows individual extension numbers to be name tagged and identified by linking the name displayed on the phone's LCD screen with the number the caller has dialled.

By combining CLI and DDI tagging, each incoming call can be managed appropriately on the basis of the incoming caller's details and the number they have dialled, which can be displayed simultaneously on the LCD screen. This helps your staff to provide more effective and faster responses to existing and prospective customers (e.g. at a call centre operating on behalf of a number of organisations).

A rectangular LCD screen with a black border. The screen displays two lines of text in a monospaced font. The top line shows the number '01616551100' and the bottom line shows '800212/'.

01616551100  
800212/

Top line – caller's CLI  
Bottom line – last 6 digits of DDI called

A rectangular LCD screen with a black border. The screen displays two lines of text in a monospaced font. The top line shows the name 'JOHN SMITHSON' and the bottom line shows '627/SUPPORT'.

JOHN SMITHSON  
627/SUPPORT

Top line – caller's name (from directory)  
Bottom line – purpose of call

## ISDN – faster, smoother connections

ISDN is the most cost-effective way of connecting your telephone system to the outside world. The Samsung *z*DCS supports Basic Rate and Primary Rate ISDN, allowing you to reap the functionality and cost benefits that ISDN delivers:

- Enhanced quality – immediate, high-quality connections give you better customer communications
- Increased functionality with the application of Calling Line Identification (CLI) and Direct Dial In (DDI) call tagging
- Cost-effective inter-office data routing
- Future-proof technology as ISDN protocol standards migrate
- Video and data networking – the high capacity of ISDN connections enables efficient video conferencing and cost-effective inter-office data transfer, ideal for e-mail, and internet access.



## Traffic management – divert, transfer and conference with ease

The power of ISDN also brings you trunk to trunk functionality, which enables calls to be seamlessly and invisibly diverted from your office to a mobile phone or your home number, ensuring that you are always in touch – wherever you are.

Calls can also be transferred between different offices as easily as to the next desk, overcoming the problem of different departments in different locations.



**ISDN**



Conference calls between multiple locations can minimise the time and resource wasted travelling to and from meetings, maximising your efficiency. The *z*DCS allows a mixture of internal extensions and external lines to take part in conference calls. Up to five callers can come in and out of the conference as necessary.



## Uniform Call Distribution (UCD) – sophisticated call handling for any office

The iDCS unique integral UCD package, provided as a standard feature to all users, offers any office environment the opportunity to optimise the service incoming callers receive and maximise the efficiency of your staff.

Calls can be distributed intelligently – using first in first out (FIFO) rules – to the first available extension within the group. This can minimise the length of time before a call is answered and ensure you keep an even flow of call traffic to all members of a group. If no extensions are free, the call can be held in a queue, while automated messages reassure them of prompt attention as soon as the next call handler becomes available.

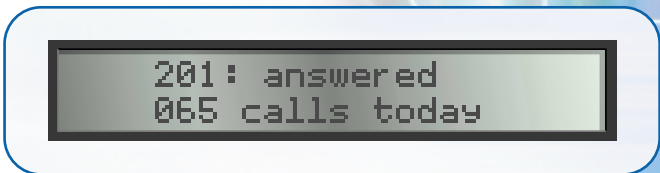
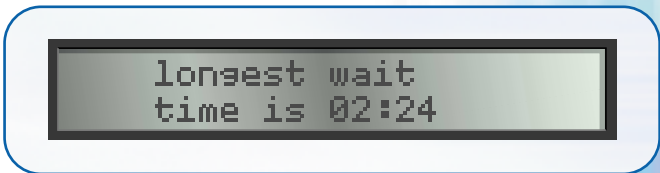
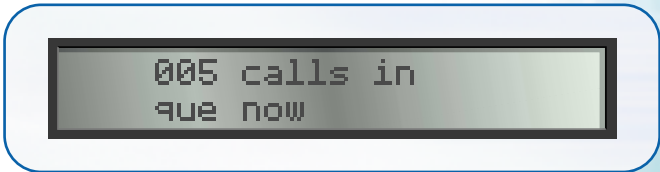
The iDCS can serve up to 20 groups – each with a maximum of 48 agents, allowing calls to be recorded when necessary and giving agents time to complete administration before accepting the next call.

The iDCS can also provide incoming call statistics for a group or extension via the LCD of a display keyphone, giving supervisors a simple snap-shot of call traffic and activity to evaluate the performance of groups and agents for example:

- **Calls in queue**
- **Waiting time**
- **Agent status**
- **Average queuing time**
- **Total incoming calls received.**

This functionality is ideal for those departments which operate as an incoming call centre with groups or teams of operators with their own terminals – such as your accounts department, sales desk or response centre.

In addition the iDCS can also be configured to operate within up to six time zones so that callers receive an appropriate response and routed to the correct destination depending on the time of day, week or year they call.



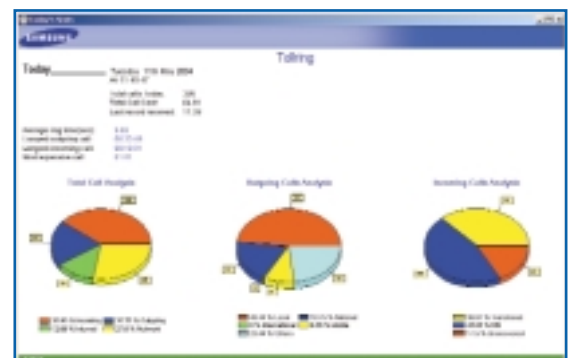
## Samsung Call Centre Solutions – advanced call analysis

Specifically tailored for call centre environments, Samsung Call Centre Solutions offer advanced desktop call management software which easily integrates with iDCS technology, providing a comprehensive breakdown of real time call information.



Up-to-the-minute, key call details can be displayed on discreet Windows desktop display or optional wallboards, to provide all staff with an easy-to-view summary of current performance rates of groups, extensions or DDI numbers – for example:

- total calls received, waiting, answered or lost
- current longest waiting call time
- average and longest queuing time
- individual agent call handling activity
- average ring time before calls are answered
- average service time after answering
- individual /group call charges
- warning alarms set against call criteria.

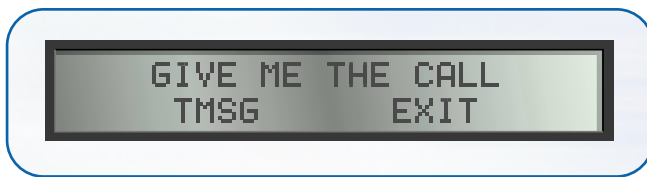


Through detailed management reports, group and extension activity can be analysed to give thorough evaluation of call traffic and operator efficiency.

This functionality ensures that you make the most of your communications resources throughout the day, enhancing your customer service levels.

## Easy as ABC – simple text messaging

The #DCS can also allow pre-programmed messages to be sent and displayed on the LCD screen of display keyphones so that operators or their supervisors can continue to communicate whilst involved in a call. In addition, individual operators can also leave their terminals with a station message so that any internal caller receives a text message showing the status of the operator (e.g. out to lunch, on holiday, etc.).



## Account coding

To help you identify how your system is being used, departmental groups and operators can enter specific codes for incoming and outgoing calls to facilitate future analysis. Coding allows you to allocate certain calls into groups or accounts so that the #DCS can provide a precise breakdown of calls made and relative costs chargeable, ideal for departments working on behalf of third parties.

## Auto Attendant – your 24 hr receptionist

With the auto attendant option, or using the auto attendant available with the integral Samsung voicemail system, you can be sure that

incoming calls are never kept waiting to be answered.

The auto attendant can answer multiple calls simultaneously, even giving each call an individual greeting.

External callers are prompted by the auto attendant to dial for direct connection to the correct person, without the need for the receptionist to handle the call. However, if no

extension number is dialled within a specified time the call will be automatically connected to the receptionist, or another specified extension.

Of course auto attendant can work independently, or in association with the optional voicemail system.



## Get connected – to make the most of private networking

The true power of the *i*DCS lies in its enhanced networking technology. Offering you a range of powerful options to link systems and share functionality across multiple sites, the *i*DCS is the ideal private business networking solution.



### QSIG

QSIG is an international, open protocol which enables compatible telephone systems to be integrated across multiple locations and create a high level of feature transparency. As such you can link the *i*DCS to existing legacy systems, so you don't necessarily need to invest in new technology across all sites.

Using QSIG signalling, the *i*DCS routes incoming calls between sites, for example a branch network across a region or territory. This enhances the customer service provided to incoming callers, with their calls being forwarded seamlessly to the nearest office and managed appropriately based on the CLI and DDI information. The *i*DCS also allows all users to benefit from the cost-effective sharing of selected features across the network. They can access centralised functionality – from simple call forwarding and transfers to advanced features such as operator services, voice mail, automated attendant and UCD across connected sites.

## AC15

The use of AC15 analogue lines can help you to make the most of private circuits or tie lines, providing voice networking between multiple sites. The iDCS allows you to optimise your use of key private network features such as call transfer, desk-to-desk dialling over private lines, and break-in/break-out of calls over the private network.

Multiple networked systems can also be programmed so that if an incoming call arrives at an office which has closed for the evening or a holiday, it will automatically be re-routed to another office which is open to take the call. This allows your organisation to have a live operator available to callers at all times so you never miss a call.

## Branching out with VoIP

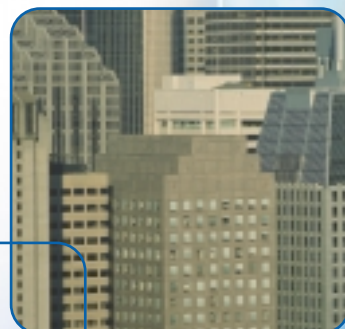
The internet is revolutionising the way business operates, opening up a whole world of information and opportunities. The iDCS is at the forefront of this communications revolution, providing Voice over Internet Protocol (VoIP) functionality.

Put simply, VoIP redefines the next wave of data and phone integration, creating more effective applications and reducing the ongoing costs of call traffic between linked sites.

VoIP vastly reduces communication costs by encoding your telephone calls into Internet Protocol then routing and delivering calls in the same way that data and video are sent now – utilising spare bandwidth of existing data links over a private network. The iDCS also has the functionality to use the public telephone network to route calls via VoIP when this service becomes available in the UK.

Shifting telephone traffic, as well as fax transmissions, to internal data lines saves money, and eliminates the need for separate information pipelines and separate staff to manage and maintain them.

The iDCS uses the worldwide standard H323 protocol, so you have no need to worry about obsolescence. With the system's flexibility to route calls without using IP protocol, there is also in-built resilience in the event of a problem with your data network.



## Style and simplicity

The *i*DCS has a wide range of easy-to-use ergonomic handsets, which maximise the benefits of the system and give each user the correct handset for their needs. A choice of simple telephones, DECT handset or fully featured keyphones with LCD display and programmable functions are available.

Display keyphones offer either 38, 14 or 7 programmable, fast-dial keys with LED status indicators, and an LCD screen to display call and integral system information.

Non-display phones are a cost-effective solution for staff who do not require CLI or DDI information but benefit from the call handling functionality offered by the *i*DCS, ensuring everyone has their own point of contact and individual extension.

A host of features are available at the touch of a button, depending on which handsets you choose, including:

- **CLI and DDI information** – so you can see who is calling you and what number they are calling in on
- **Context Sensitive Keys** – displaying which functions are available and giving access to the system's integral telephone directory
- **Speed Dialling** – from the handsets' programmable keys
- **Appointment Reminder** – to remind users of meetings and appointments
- **Redialling** – auto-retry, last number redial and save number
- **Call Forwarding** – if you are engaged, unavailable or out of the office
- **Call Pickup** – allows a group of extensions to answer each other's calls
- **Integral Paging** – internal and external paging without a costly, bespoke system.



## DECT – the freedom of cordless technology

DECT (Digitally Enhanced Cordless Telephony) takes office telephony into new areas, giving your staff complete freedom to move around the office, while still being able to make and take calls. Samsung DECT Solutions integrate with the iDCS to provide an advanced range of features you would expect from a digital keyphone.

Up to 250 handsets can be registered and configured per system so that staff can stay in touch and manage their calls from anywhere in the building, benefiting from an array of sophisticated features, including:

- **65 Entry Phonebook**
- **Text Messaging between handsets**
- **Vibrate Alert**
- **LED indication of incoming and missed calls**
- **Call Barring Set Up**
- **Do Not Disturb and Conference Call Set Up**
- **Personal Call Log.**

DECT can be a real problem solver for companies with staff who need mobile communications at work. If your company has a large site or if your sales, warehouse or service staff carry mobile phones or pagers whilst at work, then DECT can improve their working efficiency and reduce the ongoing communication costs of your organisation.

## Hot Desking – complete connectivity for roaming staff

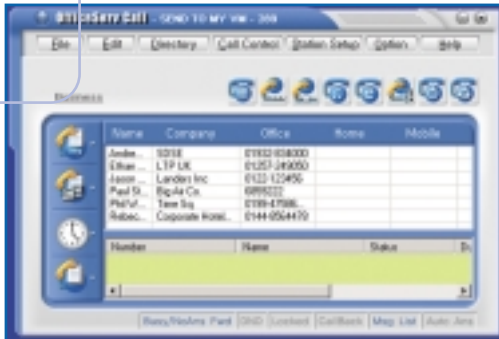
If members of your staff often work from different locations or departments within your office, then hot desking can be an invaluable tool. By entering individual access codes, users can move between different desks and even transfer their own personal features – such as access to voicemail, speed dials and pre-programmed functions – to the relevant handset.

For mobile members of staff, or occasions where you need to move a number of people around the office, hot desking is a simple and effective solution that keeps all your staff in touch and in control of their communications.



## Get smart with your PC

Voice and data communications have never been more important to your business and with barriers between telephony and IT being constantly eroded, the *i*DCS has been designed to maximise the benefits of Computer Telephony Integration (CTI) technology.



Samsung's CTI Suite is a simple-to-use and cost-effective tool which can improve the operation of almost any organisation, offering features such as screen popping,

PC-based telephone operation, message and contact management. Microsoft TAPI compliant, it is compatible with a wide range of industry standard software.

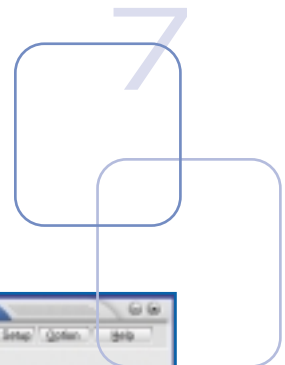
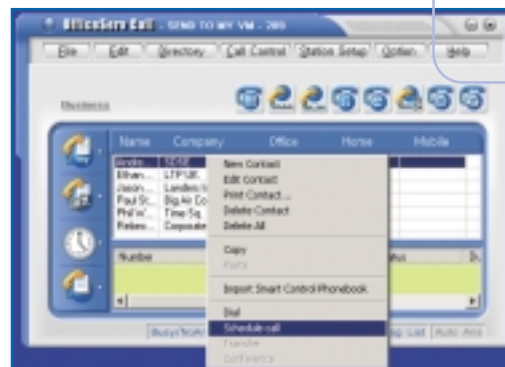
## Maximising communications performance

With Samsung CTI, you can access and manage all the services of your handset from an easy-to-use Windows application on your PC. Functions such as on-screen dialling, call forwarding, tele-conferencing and speed dialling are all accessible at the click of a mouse.

No other phone system brings the benefits of CTI as cost-effectively, or as easily, as the *i*DCS. It downsizes CTI so that almost any organisation can experience its benefits – either individually or across your network so that your whole office can communicate more efficiently.

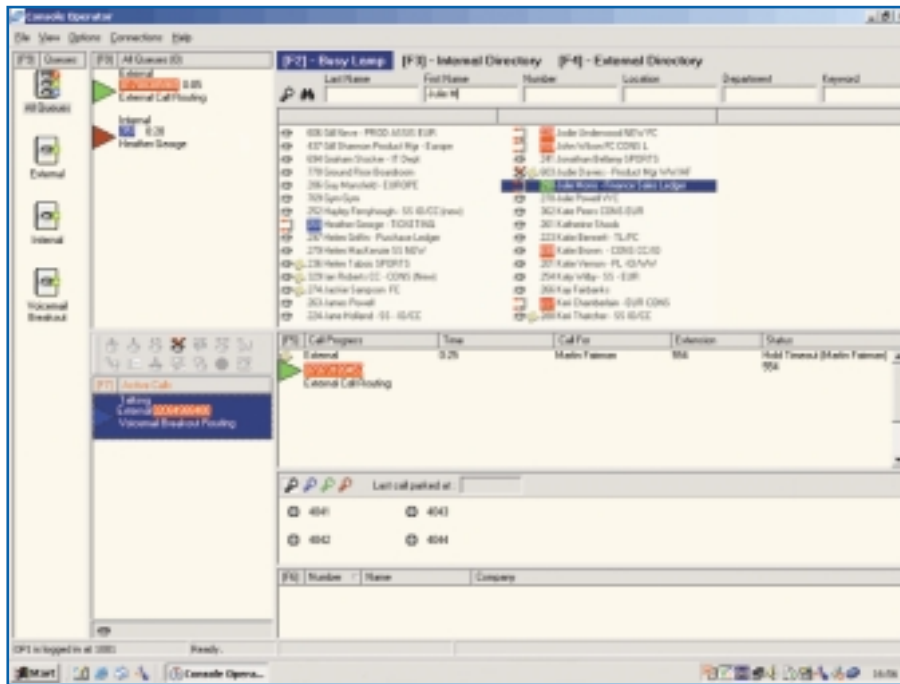
## Enhancing customer service

Samsung CTI Suite enables you to manage incoming and outgoing calls more effectively, with the ability to use your existing contact database as a central directory to schedule and log all call activity. Through real time sharing and maintenance of vital, up-to-the-minute customer information held on your files, CTI allows you to reap the benefits of faster and smoother call handling and present a more professional face to the outside world.



## Samsung Operator Solutions – professional call control

First impressions count. So it is imperative that incoming calls are managed as professionally and efficiently as possible by your front line staff. That's why Samsung has developed PC-based operator solutions that make handling high volume call traffic as smooth and simple as possible.

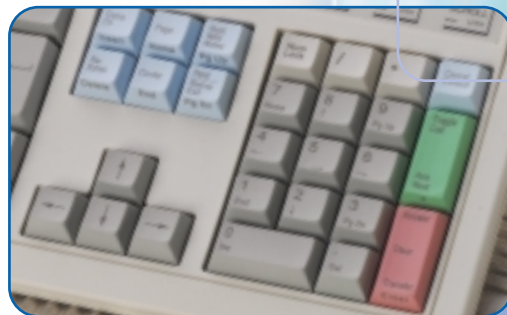


Samsung Operator Solutions are fully integrated with your voice and data infrastructure to maximise the responsiveness of customers' first point of contact with your organisation.

With the simplicity of 'point and click' operation, or using the optional console keyboard, incoming and internal calls can be forwarded to their final destination, assigned to departmental queues, even added to conferences. The status of individual extensions can also be controlled, for example: assigning divert to another number, activating voicemail or placing on do not disturb.

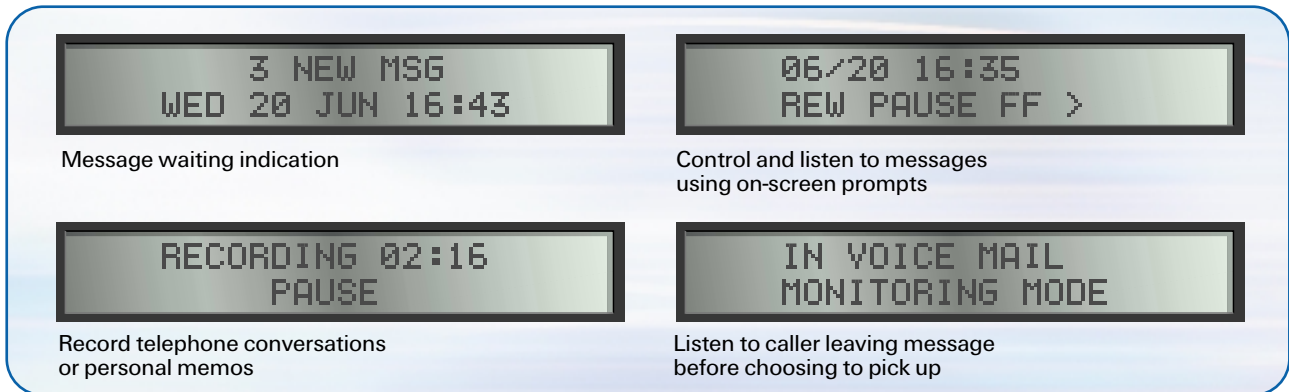
As well as providing the advanced functionality of the #DCS through a user's PC, Samsung Operator Solutions have a notes facility, which attaches information to specific calls, acting as reminders for the call handler as to who is calling and any messages they may have.

Samsung Operator Solutions are an invaluable tool for people who manage high volumes of calls, and the definitive application for any busy office.



## Samsung voicemail – the ultimate call processing solution

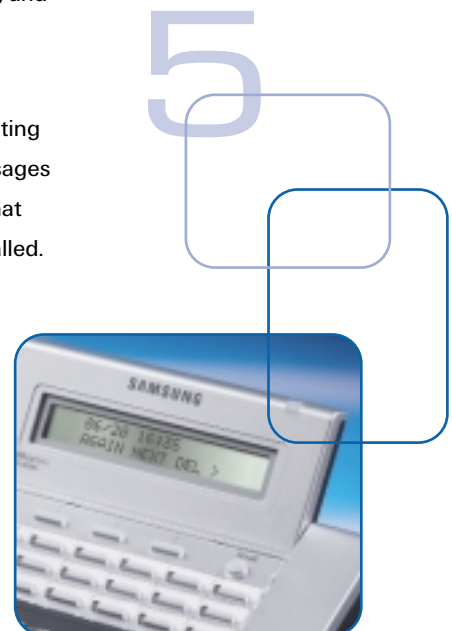
The Samsung iDCS range is available with superior voice mail and automated attendant functionality. Samsung voicemail offers users a sophisticated call messaging solution which has been designed to fully integrate and interact with the iDCS, maximising its ease of use and functionality.



Samsung voicemail software can be intuitively programmed to provide your organisation with an efficient call handling system, which optimises the service levels to inbound callers and the efficiency of your employees. With the touch of a button users can navigate through the system's functions, guided by the LCD display.

Each user is able to record their own personal greeting; forward messages to colleagues or to another number, such as a mobile phone; screen calls before deciding whether to take the call; send messages to a group of extensions; record personal reminders, and even record conversations, ideal for those more sensitive discussions.

However, Samsung voicemail offers much more. Message waiting indication ensures that users are immediately aware that messages are pending; messages are 'stamped' with the date and time that they were left, and even with the number of the person who called. Users are also able to set alarms, perhaps to remind them of a meeting, or to make a call and the system's auto forward feature ensures that if messages aren't accessed within a specified time they are forwarded to a designated extension. And all this at the touch of a button.



## Least-cost routing & system management – minimising cost and maintenance

The iDCS provides a comprehensive variety of management data, including cost reports and full details of inbound and outbound calls. It can be programmed to restrict certain types of calls (e.g. premium rate, mobile or international numbers), helping to eliminate unauthorised telephone use and minimising bills.

The comprehensive least-cost routing functionality can choose from up to 32 different call providers to ensure that the cheapest route is chosen for each call your staff make.

Using the optional remote access functionality, systems may be remotely programmed, upgraded and diagnosed to ensure that your system is in optimum condition at all times, without the need for an engineer to visit your offices.

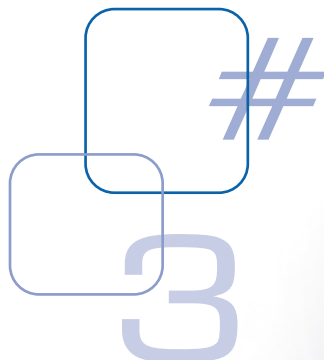
## S<sub>0</sub> Bus – voice and data networking technology

Samsung's S<sub>0</sub> Bus technology can be incorporated into your system to link networked equipment – such as PCs – through iDCS to the ISDN connection. This allows LAN users to transmit or receive information over a high-speed link, without the need for an additional ISDN line, and enables dial-in access to the LAN for remote users and employees at other offices.

Each S<sub>0</sub> Bus provides a transmission rate of 128kbit/s, which can be expanded by merging multiple S<sub>0</sub> Buses. This provides fast internet access, video and data communications. Bandwidth can be allocated directly to specific LAN users, or to a pool to be shared by users as and when required.

## Administrator programming

The Samsung iDCS also allows selected administrative staff PC-based access to basic system programming. Simple alterations can then be made internally, helping you to manage and control the way your solution operates.

A screenshot of the iDCS programming interface. The window title is "iDCS - Station List Programming". The interface shows a tree view on the left with categories like Stations, Trunks, Trunks, Systems, and Events. A table is displayed in the main area, titled "Station No 201". The table has three columns: Key file, Function, and Extension. The data in the table is as follows:

Key file	Function	Extension
1	CALL	1
2	CALL	2
3	INFOSP	
4	VG	500
5	HOSET	
6	DIR	
7	VMMBO	
8	DR	308
9	PWRD	SP/Ans
10	RP	2
11	RP	1
12	PWRD	All
13	D6	224
14	D6	300
15	D6	320
16	D6	300
17	D6	308
18	D6	321
19	D6	326
20	D6	326
21	D6	326

## **Main system features**

Account code entry  
Authorisation codes  
Auto Attendant  
Basic Rate & Primary Rate ISDN  
Call barring  
Call Centre software  
Calling Line Identification (CLI)  
Chain forwarding  
Computer Telephony Integration (CTI)  
Conference calling  
Conference splitting  
DECT compatibility  
Dial by name  
Digital and analogue handset compatibility  
Direct Dialling Inward (DDI)  
Direct Inward System Access (DISA) with security  
Direct Station Selection (DSS)  
Directory of names and numbers  
Distinctive ringing  
Door entry facility  
Group listening  
Headset working  
Hot desking  
Hotel software (PMS integration)  
Integral paging  
Keyphone daughterboards  
Least-cost routing functionality  
Music-on-hold – external and internal sources  
Number to name translation (CLI and DDI)  
Off hook alarm  
Outbound CLI  
PC-based operator solution  
Programmable functions  
Programmed message display  
Redialling functionality  
Scratch pad dialling  
S<sub>0</sub> Bus working  
Speed dialling  
Structured cabling ready  
Text messaging  
Time of day features  
Traffic reporting (manual and scheduled)  
Trunk to trunk conference/divert/transfer  
UCD functionality via PC, wallboard or printout  
Uniform Call Distribution (UCD)  
Voicemail integration.

*Some features may require additional hardware or software to be purchased.*

## Main Networking Features

- Call completion
- Call forwarding
- Call hold and recall
- Call intrusion
- Call transfer
- Centralised attendant\*
- Centralised voicemail\*
- DND and DND override
- Extension number and name display
- Intercom calling
- Networking class of service
- Route optimisation
- Transfer retrieve and recall
- Uniform dialling plan.



## Main VoIP Features

- 8 port card
- H.323 protocol
- CLI transmission
- DTMF transport using H.245 signalling
- Fax over IP (T.38)
- Gatekeeper support
- RTP Quality of Service Monitoring
- SMDR billing output

## Specifications and configuration

- Station speed dial – 50 entries per station\*
- System capacity – up to 66 extensions, 96 ports\*
- System speed dial – 1500 entries total\*

*Some features may require additional hardware or software to be purchased.*

*\* Subject to product specification. Please check availability with your chosen vendor.*



## A Samsung DigitAll Revolution

Samsung Telecoms is a division of Samsung Electronics – a global leader in the manufacture and supply of innovative electronics solutions – which in turn is part of the Samsung Group, one of the world's largest companies with global turnover exceeding \$100 billion and more than 170,000 employees.

With a proven pedigree in the manufacture of electronics for commercial and domestic applications, an annual R&D budget of over \$2 billion, and 63,000 staff committed to the development of fixed and wireless communications, Samsung is at the forefront of delivering converged voice and data technologies including Voice over IP, WAN integration and SIP.

Samsung Electronics' core strategy continues to be to maintain leadership in the digital convergence revolution with the mission to bring innovation and digital technology to all products in ways that will make life easier, richer, and more enjoyable for all generations and all customers. This philosophy is known as Samsung DigitAll and everyone's invited to join us in achieving this ambitious goal.

Samsung's expertise in communications and digital technology, combined with a strong commitment to international sport, has made the group a Worldwide Olympic Partner – providing state-of-the-art equipment and playing a vital role in the Olympic experience of billions of people across the globe.

With this backing, Samsung Telecoms is perfectly placed to exploit the convergence of telephony and IT services, and provide organisations with cutting-edge communications solutions.



Samsung Telecoms (U.K.) Limited,  
Brookside Business Park,  
Greengate,  
Middleton,  
Manchester M24 1GS  
Tel: 0161 655 1100  
Fax: 0161 655 1166  
www.samsung-telecoms.co.uk  
email:marketing@samsung-telecoms.co.uk



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