



HiPath 3000 HiPath 3250 /3150

Communication Systems for Small Enterprises

HiPath™ 3250/3150 systems are communication systems from the HiPath 3000 product family, based on Euro-ISDN technology (DSS1) for digital network and system interfaces. Depending on the system variant up to 16 stations are possible that fulfill all communication demands of a small business.

Interactive user prompting via display and dialog keys on the optiset E digital system telephone provides for easy and quick activation of features.

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Numerous additional devices can be attached directly to the optiset E telephone via a flexible adapter concept. Single workstations can quickly adapt to changing conditions.

Additional mobility is made available by the integrated HiPath Cordless Office solution. The system telephones convenient user prompting is also available on feature telephones and offers simple use of system functions.

In the case of sector concepts, networking with other HiPath systems is achieved using the performance-optimized CorNet N networking protocol.

Least Cost Routing (LCR) makes it possible to automatically select the most economical connection depending on the time of day and route via selected carriers.

The HiPath 3000's universal software concept offers a professional scope of features for HiPath 3250/3150.

Features

System features

The HiPath 3250/3150 system offers a wide range of features.

Selected features

- **Caller list.** Unanswered internal and external calls are recorded on system telephones with a display if external calls contain a directory number (ISDN) and internal calls are transmitted with the caller's name. The calls are entered in a list with a date and time stamp and the number of call attempts is recorded. A callback can be initiated directly from this list.
- **Do-not-disturb/"silent call".** Users can block incoming calls. Callers hear the busy signal when "do-not-disturb" has been activated. Authorized users (attendants, for example) can override this feature. Acoustic signaling of calls can be deactivated on system telephones so they are only indicated on the display.
- **Call pickup.** Calls can be picked up on users' own telephones within a call pickup group or selectively for specific colleagues.
- **Override.** Authorized stations can intrude on other users' calls in progress.
- **Classes-of-service** Different access authorizations can be assigned to each user, with a distinction being made between
 - full toll access
 - partial toll access
 - no toll access
- **Broadcast intercom call** to system telephones or over external loudspeakers (in a waiting room, for instance)
- **Call cost logging** for each terminal or each trunk in the summation memory. Call duration display is used for analog lines without call charge pulses.
- **Group call** For groups of up to 8 users. Individual stations can temporarily leave the group.
- **Line keys (MULAP)**
The following flexible setups are possible with line keys:
 - teams,
 - executive/secretary functions,
 - feature handset (gigaset) in parallel with an optiset E telephone on a single directory number (only in conjunction with HiPath cordless).
- **Internal telephone book.** All extensions are stored with their associated names in the system's internal telephone book. They can be searched and dialed directly via the display on system telephones.
- **Speed dialing individual/system.** For all services it is possible to store up to 10 destinations on each telephone individually and up to 300 destinations centrally in the system.
- **Toggleing** between two existing connections
- **Text messages.** You can send users predefined (e.g. "Visitor waiting") or personal short messages (optiset E memory only) via the display.
- **Internal texts to the feature handset.** When HiPath cordless is used it is also possible to send internal text messages to the feature handset.
- **Advisory messages** can be left on your own telephone (e.g. Back at:....).
- **Project code.** Telephone costs can be assigned to a specific procedure or project by entering the project code (max. 11 digits).
- **Call number suppression.** With ISDN connections, callers can suppress the display of their directory number on the called party's terminal either on a cross-system basis or temporarily.
- **Distinctive call signaling** for internal calls, external calls, recalls, and callback calls
- **Add-on ringing.** Call signaling simultaneously at several telephones
- **Connection** for door interface. Calls from the entrance telephone can even be routed to an external destination by using external call forwarding
- **Automatic redial (expanded)** for the last three external call numbers dialed

Standard features

- **Intercept position/attendant console**
- **Camp-on/call waiting tone**
- **Call forwarding from the extension**
- **Display languages** (can be specified individually)
- **Conference** (internal/external)
- **Line seizure** (automatic)
- **Music on hold**
- **Night service/day service**
- **Call park**
- **Consultation**
- **Callback** on busy and no answer (automatic)
- **Call forwarding** - no answer after timeout
- **Hunt group** (linear/cyclic)
- **Lock telephone** (individual code lock)
- **Telephone book, central**
- **Transferring a call** (internal/external)
- **Recall**

Euro-ISDN features

The prerequisites for a pan-European, uniform communication structure have been met by the DSS1 Euro-ISDN standard. This allows the cross-country use of services and features which are also supported by HiPath 3000.

The following Euro-ISDN functions are supported:

Services. Voice and group 3 fax are transmitted on a 3.1 kHz bandwidth; data and group 4 fax are transmitted at 64kbit/s per B-channel.

Direct dialing in (DDI). This feature allows direct dialing in from the operator network to any individual PBX station.

Point-to-multipoint connection. Up to 10 MSNs can be administered

Calling line identification presentation (CLIP). The caller's ISDN directory number is transmitted to the called party.

Calling line identification restriction (CLIR). The caller's ISDN directory number is transmitted to the called party. This feature can be initiated by the dialing party on a cross-system basis or temporarily using a procedure.

Connected line identification presentation (COLP). The called party's directory number is displayed to the caller.

Connected line identification restriction (COLR). Display of the called party's directory number to the caller is prevented.

Multiple subscriber numbers (MSN). Users connected to an S_0 bus can be assigned individual call numbers (MSNs) from the PBX's numbering scheme via which they can be directly addressed (e.g. PC cards, group 4 fax. 4).

Advice of charge (AOC). Call/connection charge information is transmitted to the PBX during or after the call. This information can be shown on the station display in units or currency amounts.

Sub-addressing (SUB). Information additional to the directory number is transmitted to the dialed distant station. This can be used to trigger certain procedures. A response is not possible.

User-to-user signaling (USS1). User-to-user signaling allows a limited volume of information to be transferred in both directions from one terminal to another via the signaling channel.

Call forwarding in the operator network (CFU, CFB, CFNR). All calls intended for an ISDN line are forwarded to any destination. This feature is activated from an authorized telephone and applies to the entire connection in the case of a DDI call (point-to-point). In the case of a point-to-multipoint connection only the MSN assigned to the telephone is forwarded.

Call Deflection (CD). Calls for an internal user who has activated external call forwarding are deflected via the public exchange to the external destination station. The B-channels are thus not required and are released.

Callback in the operator network (CCBS). If an external called party is busy it is possible to store a callback request in the operator network. The initiating party is called back when the party is free.

Malicious caller identification (MCID). With this feature, malicious callers can be identified in the operator network. Use of this feature must be requested from the public carrier.

Executive/secretary features

These features ensure rapid communication between executives and secretaries.

- Camp-on at an executive's phone by the secretary's phone
- Secretarial function transfer
- Call transfer to the secretary's phone
- DSS keys for executive/secretary
- Conference corner telephone with parallel call signaling to the executive's phone
- A private line can be set up for either the executive or secretary
- Inclusion of the gigaset feature handset for mobile accessibility

Data protection/data security

To protect the communication system and customer data from unauthorized access, the Service menu can only be entered by means of individual user IDs. This means it is possible at all times to establish who carried out what system modifications and when.

System administration is structured as follows:

- **User data:** Access via the Service menu using an individual user ID and password to protect customer data such as speed dialing destinations and call charge data. Communication system owners can make minor system settings with a defined scope themselves.
- **System data:** Access via the Service menu using a user ID for system administration and password. Access to this data area is restricted to qualified personnel and is password-protected. All system settings are possible, with a few exceptions.
- Password concept with individual identification and authentication
- System access via telephone or service tool and remote access is controlled
- Administrative procedures can be logged ("Who made changes, and when")

Least Cost Routing

HiPath 3000 uses this function to automatically control the path used for an outgoing call. Calls can be routed via the public network with various carriers or a private network. The most favorable connection path for the external call is found using the routing tables.

A trunk is seized after reference to the routing tables. These analyze the digits dialed by the user and determine the directory number to be dialed by the system.

Individual network providers in many cases offer different charge rates for certain connections and conditions, so with Least Cost Routing it is possible to automatically select the most economical connection for each outgoing telephone call depending on the time of day and route.

Networking

HiPath 3000 can be networked with other HiPath 3000 systems. Our local sales units will be able to provide you with details of the features that are possible.

Digital nailed connections

Corporate communication networks can be implemented over digital S₀ nailed connections between several HiPath 3000 systems using the CorNet N protocol. The systems are linked with each other via public and/or private lines.

Virtual network

A virtual network of HiPath 3000 systems via S₀ dialup lines is advisable from an economic viewpoint in situations where nailed connections are not viable owing to low traffic levels or if the full range of services offered by a nailed connection is not required.

Solutions

Attendant console

An optiset E system telephone can be used as an attendant console. This allows outside calls to be extended if the direct dialing in (DDI) function has been set up. In DDI mode, this position can be organized as an information, intercept, or night service station.

You can make use of special features in addition to the conventional telephone functions. These are:

- night service
- telephone book
- number of queued calls (can be set up on up to six telephones in the system)
- enabling for call waiting
- hold
- call key 1
- call key 2
- release

In addition, a key can be set up with the "error key" feature.

The attendant console can be accessed internally via a second directory number.

It is possible to extend undialed lines and calls on hold.

If the number of users on hold reaches a preset level, calls will be forwarded to a specified destination. This will also take place when the length of time a call is queued exceeds a specified limit.

Operation is also possible without an attendant console. In such cases, the user assigned in each case to one line will be regarded as the attendant.

Applications

Smartset. This software for making calls from the PC records both incoming internal and external (ISDN) calls in a caller list. Comparing this number to numbers stored in the PC's address book identifies the ISDN caller. DP programs can also be initialized on incoming ISDN calls.

Efficient communication in law firms and tax offices. The communication solution for special demands in law firms, notary offices and tax advisor offices with call charge and call duration recording as well as automatic transfer to appropriate DP programs (such as Jurasoft GmbH).

HiPath TAPI. The driver software was developed as a supplement for connecting a PC to digital system telephones on HiPath 3000. Support is provided for TAPI-conform CTI applications.

TeleData Office is a PC-based software program for recording and assigning incoming and outgoing call charge data that permit evaluation by extension, trunk, department etc.

The call charge data can be transmitted directly to a central server via the LAN interface.

System administration

System administration by the customer can be carried out either on the telephone via Assistant TC or using HiPath 3000 Manager C.

Attendant TC allows customers to perform administration tasks on an optiset E telephone with a display. The optiset E memory telephone is recommended, as this has an alphanumeric keypad (e.g. for entering station names etc.).

HiPath 3000 Manager C is a customer tool that runs under Microsoft® Windows and is installed on the PC connected to the system via an RS-232 or S₀ interface.

The service technicians have other PC-based service tools to assist them in completely installing the communication system and for comprehensive administrative functions; they can also make changes and settings on the communication system using remote maintenance. Customer data is guaranteed maximum protection at all times, in accordance with applicable data protection legislation.

The HiPath 3250/3150 communication systems can be incorporated in Ethernet LANs by means of a LAN interface. Data is exchanged using **SNMP** (Simple Network Management Protocol). The following functions are supported:

- System administration
- Error management
- System software updating

Telephones

The following optiset E digital system telephones (2-channel U_{PO/E} interface) are available for various workstation requirements:

optiset E entry

The economically priced solution for people wishing to enter the world of digital technology.

optiset E basic

The basic configuration for voice and data communication.

optiset E standard

The comprehensive offer whose performance is optimized for telephoning.

optiset E comfort

The professional solution for voice and data communication.

optiset E conference

The system telephone with a professional hands-free facility with full duplex amplifier.

optiset E memory

The top-of-the-line model for frequent telephone users.

optiset E key module

Add-on device for optiset E telephones (16 function keys with LED) for name keys or service functions. Up to four add-on devices can be connected to one optiset E telephone.

The optiset E system telephones are available for delivery in warm gray and black.

Adapter

A wide range of optiset E adapters are available offering a high level of flexibility when it comes to meeting the requirements of individual workstations.

optiset E acoustic adapter

For connecting telephone accessories such as a loudspeaker box, second handset or add-on microphone.

optiset E analog adapter

For connecting an analog terminal such as a group 3 fax machine.

optiset E contact adapter

With two floating connectors for controlling external devices such as lamps and second bells.

optiset E data adapter/optiset E control adapter

For CTI applications (Computer Telephony Integration).

optiset E ISDN adapter

For connecting ISDN terminals with a non-powered S₀ interface (e.g. PC with S₀ card or video equipment).

optiset E headset adapter

For connecting two headsets.

optiset E headset plus adapter

For connecting two headsets and one tape.

optiset E phone adapter

For connecting another optiset E telephone.

Technical Data

Interfaces

On the network side

Euro-ISDN

- S₀ basic rate access with DSS1 protocol
 - System connection
 - Point-to-multipoint connection

On the user side

Analog

- a/b for connecting analog terminals such as group 2 and 3 fax, or modem.

Digital

- U_{PO/E} for connecting digital 2-channel system telephones,

Euro-ISDN

- S₀ system interface for up to 8 independently powered terminal devices (e.g. group 4 fax, ISDN PC card)

Other interfaces

V.24

- For connecting a service PC, call charge computer, call charge printer.


S_{0FV} with CorNet N protocol

- Digital nailed connection for networking in company networks)

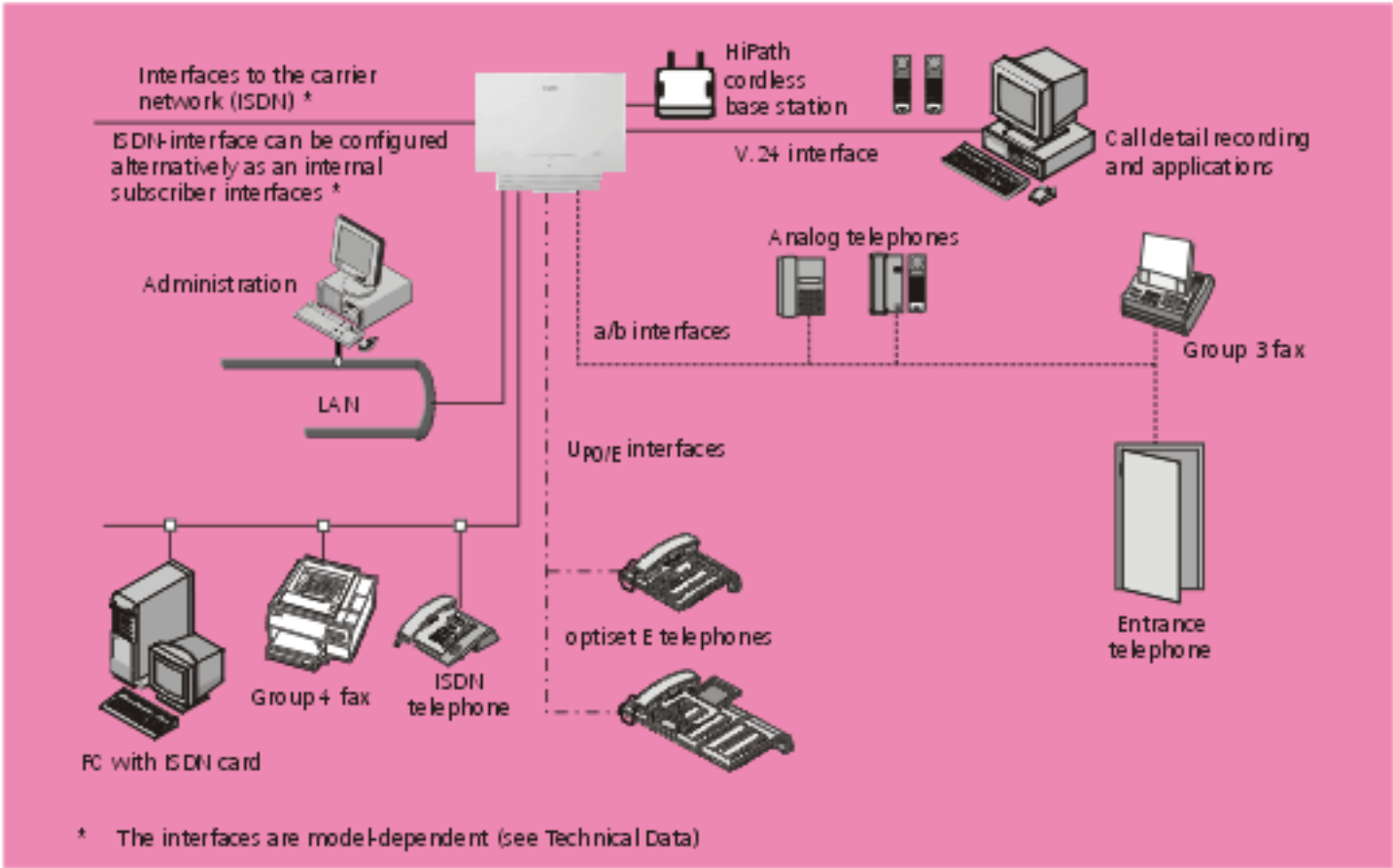
LAN interface

- 10 Mbit for system administration via TCP/IP

Technical Data

Expansions	HiPath 3250 (Wall-Mounted System)	HiPath 3150 (Wall-Mounted System)
Analog users (a/b) max.	4	4
Digital users (U _{P0/E}) max.	4	2
Additional stations via optiset E phone adapter	4	–
Maximum stations, HiPath cordless	8	8
Total stations (including cordless)	16 max.	14 max.
Maximum number of HiPath cordless base stations	3	1
Connections to operator network	max. 2 S ₀ (4 B channels) ISDN (S ₀)	max. 1 S ₀ (2 B channels) ISDN (S ₀)
S ₀ user busses	2 max.	1 (constantly attached)
V.24 interfaces	1	1
CSTA interface	–	–
optiClient Attendant (PC attendant console)	–	–
Networking	yes CorNet-N	yes CorNet-N
IP networking Maximum number of nodes in the network Maximum number of stations in the network	–	–
Number of HiPath HG 1500 Gateways	–	–
Administration via TCP/IP	yes	yes
CTI TAPI	yes	yes
Dimensions H x W x D (in mm)	290 x 365 x 65	290 x 365 x 65
Weight	approx. 1 kg	approx. 1 kg
Case color	Warm gray	Warm gray
Software version	V1.2 (IM)	
		

System configuration



Our strengths - Your advantages

Siemens is known worldwide as a trailblazer in the advancement of information and communication technologies. No other company offers such a comprehensive and innovative product portfolio.

With the one-of-a-kind Siemens convergence architecture, HiPath, guide your customers to a secure and flexible migration into the world of innovative IP convergence solutions.

www.hipath.com

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