



## HiPath Cordless Office for the HiPath 3000 Series

HiPath Cordless Office is the integrated cordless solution in the HiPath 3000 series for cordless communication with convenient user and system features.

Providing employees with cordless phones for bridging distances via a radio link greatly helps to ensure maximum accessibility and faster decision-making, resulting in organizational and economic advantages.

**SIEMENS**

Global network of innovation

The flexible system architecture alongside the digital radio transmission standards employed, namely

- DECT (Digital Enhanced Cordless Telecommunication), the globally acknowledged standard, and
- the GAP (Generic Access Profile) standard for using different manufacturers' cordless phones

form the basis of a high level of mobility and permanent accessibility within the company (also across different corporate locations) and on company grounds extending over a wide area. They thus offer a high degree of investment protection and future-proof functions.

On the basis of the modern DECT and GAP standards, HiPath Cordless Office offers users a range of convenient features.

## System features

### Gigaset 4000 C feature handsets/ Gigaset 4000 Micro/Gigaset active

A high degree of flexibility makes the "Gigaset 4000C, 4000 Micro and Gigaset active" handsets the favourites among the cordless phones. They offer excellent digital speech quality, a high degree of immunity to eavesdropping and a long range (up to 50 meters indoors and up to 300 meters outdoors).

Not only are investment and operating costs low; the handsets also feature easy user prompting and a 4-line display with menu selection keys.

Another plus is that access to the entire cordless system is protected: "third-party" cordless phone users are prevented from gaining unauthorized access as the handsets are logged on to the system centrally.

The feature handsets of HiPath Cordless Office allow users to conduct phone calls throughout the radio-provisioned area. With the feature handsets it is possible to use the HiPath 3000 communication system's features while moving around the grounds (toggle, consultation, conference).

## Base stations

The base stations form the radio cells and conduct communication with the cordless terminals (feature handsets). They are connected with 1 to 3 system-specific  $U_{PO/E}$  interfaces to the radio switch or with 1  $U_{PO/E}$  interface directly to the system control. The type of connection depends on the system variant. This allows up to 12 calls (when 3  $U_{PO/E}$  are connected) to be conducted simultaneously via one base station.

The precise location of the base station must be determined using radio illumination measurements and project planning to ensure the radio network is optimally sited for covering the building or grounds.

The base stations can be encased to protect them from the weather.

## System connection

Depending on the system capacity stage, handsets are connected to the system either via a radio switch or directly to the system control. User data administration for the entire cordless system is performed directly by the system software, giving the advantage of simple system management.

A different number of base stations and handsets is supported (see Technical data), again depending on the system capacity stage. Each of the  $U_{PO/E}$  interfaces can make 2 or 4 voice channels available depending on the hardware configuration, so that up to 250 simultaneous connections are possible in the entire cordless domain with 4 radio switches and 64 base stations. A maximum of 7 base stations and 28 connections are possible in the case of a direct connection.

## Single-cell connection

For the system variants HiPath 3300/3350/3500/3550 an entry-level version is available as a single-cell version with the specific BS3/S base station. With 2 connections this solution supports up to 8 handsets.

## Multi-cell technology

The radio coverage required in the building or on company grounds is achieved by means of multi-cell technology. The radio cells of the base stations installed in the company overlap so that calls throughout the cordless system domain can be set up and conducted seamlessly while users are moving around (roaming and handover).

## System networking

With networked systems, accessibility across system boundaries is also provided by the system with additional functions. The accessibility range can be further extended with the cross-system roaming function.

### Cross-system roaming

In a system network with up to 16 systems, the cross-system roaming function supports unlimited accessibility on the same internal phone number. Connections between the systems using the Siemens-specific CorNet N protocol are a requirement for this. Following change-over to another location, the handset logs on here using its home identification and directory number. This information is transferred over the digital connection to the home system so it knows where the user is located and can automatically forward incoming calls over the system connection.

A requirement for this is that base station radio coverage in the different corporate locations does not overlap in the network.

## Feature telephones

### Gigaset 4000 Comfort

#### Features

- Handsfree talking, illuminated handsfree talking key
- Illuminated, 4-line graphic display with symbols for displaying operating states
- Dialogue-controlled user prompting for local functions using an integrated menu in seven languages by means of display keys
- Integrated local telephone book for up to 100 entries (hard key)
- Menu-controlled user interface with access to features of the HiPath 3000 series.
- Possibility of individually setting the ringer volume, ringer tone, and handset volume
- Long talk/stand-by times
- Can be registered as a handset at up to four DECT/GAP systems (e.g. HiPath Cordless Enterprise or Gigaset)

#### Talk/stand-by times (in hours)

- NiCd up to 10/100 h
- NiMH (1500 mAh) up to 20/220 h

#### Dimensions (L x W x D in mm):

160 x 50 x 28

**Weight including batteries:** 165 g

**Operating temperature:** 0 °C to +45 °C

**Display:** Full graphics LCD module

#### Telephone settings

- Ringer volume (7 levels)
- Ringer tone (10 levels)
- Handset volume (3 levels)



### Gigaset active industrial handset

- Shockproof, unbreakable case
- Sturdy retaining clip with swivel joint
- Higher-level noise immunity
- Protection against splashing and spray water
- Explosion protection
- Keypad can also be operated by people wearing protective gloves
- Acoustics optimised to suit noisy environments
- Facility for connecting a headset
- 2000L charging unit
- **Weight** approx. 160 g



## Gigaset 4000 Micro comfort handset

Features similar to Gigaset 4000C but without handsfree talking

### Dimensions (L x W x D in mm)

122 x 43 x 18

**Weight including batteries** 98 g

### Talk/stand-by time

15/200 hours (with NiMH battery cells)



## Headset for Gigaset 4000 Micro

### Ear piece (sensitivity)

108 ± 5 dBV/Pa at 1 kHz

### Microphone (sensitivity)

-44 ± 3dBV/Pa at 1 kHz

**Weight:** 15 g

Ear strap



## Gigaset 4000L and 4000L Micro charging units

### Charging time for NiCd batteries

5 to 6 hours

### Charging time for NiMH batteries

**(1500 mAh)** 8 to 9 hours

### Power supply

220/230 V AC plug-in power supply unit

110 V AC plug-in power supply unit

### Dimensions (L x W x D in mm)

Gigaset 4000L: 85 x 76 x 77

Gigaset 4000L Micro: 85 x 77 x 80



# Technical data

## System data

Radio interface standard: DECT, GAP

Frequency band:

1,880 MHz to 1,900 MHz

1,910 MHz to 1,930 MHz

Number of carriers: 10

Bandwidth of carriers: 1.728 MHz

Transmission:

- MC (Multiple Carrier)
- TDMA (Time Division Multiple Access)
- TDD (Time Division Duplexing)

TDMA frame: 10 ms

TDMA time slot: 0.417 ms

Number of time slots per frame: 24  
(12 full duplex channels)

Absolute number of channels: 120 duplex channels

Bit rate: 1,152 Kbps

Voice encoding: 32 kbps ADPCM (Adaptive Differential Pulse Code Modulation)

Modulation: GFSK (Gaussian Filtered Frequency Shift Keying)

## System configuration

Integrated/can be integrated in

- HiPath 3250  
Direct connection: Max. 3 BS3/1 base stations with 8 handsets or 1 BS3/S with 8 handsets max. 2 call connections per base station
- HiPath 3300/3350  
Direct connection: Max. 3 BS3/1 base stations with 16 handsets or 1 BS3/S with 8 handsets 2 or 4 call connections per base station
- HiPath 3500/3550  
Direct connection: Max. 7 BS3/1 base stations with 32 handsets or 1 BS3/S with 8 handsets 2 or 4 call connections per base station

- HiPath 3700/3750  
Radio switch connection: Max. 4 radio switches Max. 64 BS3/1 or BS3/3 base stations with 250 handsets
- Radio switch connection (released on a country-specific basis): max. 16 BS3/1 or BS3/3 base stations with 128 handsets

## Radio switch

**Line interface**

- Type: U<sub>PO/E</sub>
- Number of channels per line interface: 4 32-Kbps B-channels
- Number of line interfaces: 16
- Ranges for direct connection:
  - HiPath 3250 up to 500 m
  - Remaining HiPath 3000 series up to 1000 m

## External casing

- Dimensions (L x W x D in mm): 296 x 256 x 90
- Weight: 960 g
- Operating temperature: -20 °C to +45 °C
- Relative humidity: up to 95%



## DECT base stations

**Line interface**

- Type: U<sub>PO/E</sub>
- Number of channels: 2/4 32-Kbps B-channels
- Number of line interfaces: max. 3

**Casing BS3/1 or BS3/S (1x U<sub>PO/E</sub>)**

- Dimensions (L x W x D in mm): 181 x 139 x 69
- Weight: 266 g
- Supply voltage range: 42 to 54 V (U<sub>PO/E</sub> nominal voltage = 48 V)
- Power draw: max. 1.7 W
- Temperature range Indoors: -5 °C to +50 °C  
Outdoors: -20 °C to +45 °C



**Casing BS3/3 (3x U<sub>PO/E</sub>)**

- Dimensions (L x W x D in mm): 202 x 172 x 43 (+ 44 mm for antennas)
- Weight: 474 g
- Supply voltage range: 42 to 54 Volt (U<sub>PO/E</sub> nominal voltage = 48 V)
- Power draw: max. 3.2 W
- Temperature range Indoors: -5 °C to +50 °C  
Outdoors: -20 °C to +45 °C



# 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](http://www.hipath.com)

© Siemens AG 2002 • Information and Communication Networks • Hofmannstr. 51 • D-81359 München

**Reference No.: A31002-M2000-A130-2-7629**

The information provided in this document contains merely general descriptions or characteristics of performance which in case of actual use do not always apply as described or which may change as a result of further development of the products. An obligation to provide the respective characteristics shall only exist if expressly agreed in the terms of contract. Availability and technical specifications are subject to change without notice. Printed in Federal Republic of Germany.