

# Gigaset N870 IP PRO

**The scalable DECT IP multicell system for seamless mobile communication in small and medium-sized businesses and beyond**

The Gigaset N870 Multicell System is an innovative breakthrough solution that combines DECT base stations and a DECT manager to create a highly scalable yet reliable solution for organisations that need guaranteed mobile communication across sites of any shape or size. Each DECT multicell system supports up to 250 (20.000) handsets and 60 (6.000) simultaneous calls making it ideal for small and medium organisations. For those companies which go beyond the SMB level, widen the network with multiple DECT multicell systems up to the level of an Enterprise, where seamless handover and roaming is applicable in and between all zones. With seamless connectivity with leading IP based on-premise and cloud telephony services, HD audio quality, seamless handover and roaming, the Gigaset N870 Multicell System provides complete coverage across even the most challenging sites. Simple deployment with absolute reliability is key.



UP TO  
20.000  
HANDSETS



UP TO 6.000  
SIMULTANEOUS  
CALLS



UP TO  
6.000  
BASE STATIONS



REDUNDANCY,  
SRTP/SIPS/TLS  
SECURITY



LDAP(S) AND  
CLOUD PHONE  
BOOKS



ZERO-TOUCH  
AUTOPROVISIO-  
NING



REMOTE  
MANAGEMENT



HD  
VOICE



HIGH  
DEFINITION  
SOUND



WALL  
MOUNTABLE



GIGASET  
SOFTWARE  
PLATFORM



## Feature highlights

- One hardware concept, settings define function
- Each DECT Multicell system supports:
  - Up to 250 users / SIP accounts / handsets
  - Up to 60 base stations / 60 parallel calls
  - Up to 10 simultaneous calls per base
- With N870 in integrator only role:
  - Up to 800 users / SIP accounts / handsets
  - Up to 240 base stations
  - Up to 240 parallel calls
  - Up to 20 N670
- With Virtual integrator:
  - Up to 20.000 users / SIP accounts / handsets
  - Up to 6.000 base stations
  - Up to 6.000 parallel calls
  - Up to 300 N670
- Seamless handover and roaming
- Sync over the Air and Sync over LAN
- Phonebook support: LDAP, XML, Remote, central phone book (only in Small / Medium system sizes), Broadsoft, 3CX, xHTML
- Professional zero-touch configuration via auto-provisioning
- uaCSTA support for CTI-integration
- XHTML applications by customer
- End-to-end signalling and voice encryption
- Redundancy
- Software update over the air (SUOTA)

### DECT technology with full security

DECT Technology is secure because its digital and encrypted. Eavesdropping on a conversation is not possible wirelessly. In the N870IP System, SIP Security is added to the security of the network. End to end security is now ensured. Security includes SRTP/SIPS/TLS, LDAP(S) and HTTPS.

### Scalable and future-proof

The N870 DECT multicell system is an expandable solution for any organisation. Start small and expand later when your business is requesting more users. The N870E IP PRO can support so called S, M, L, XL and XXL environments. L to XXL make use of the Gigaset Integrator, which integrates different locations, buildings and floors into one large communication network.

### Connectivity

The N870E IP DECT multicell system is interoperable with many platforms and network providers. All recent professional handsets from Gigaset are compatible with the N870E System and integrate smoothly. A full and actual list from platforms, providers and handset compatibility can be found on our wiki.

### Easy setup and configuration.

Administrators benefit from zero touch provisioning. The intuitive web based interface with online help, XML based configuration files, profiles and support of standard protocols make configuration extremely easy and fast.

# Gigaset

# Gigaset N870 IP PRO

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## Technical data

### Phonebook and dialling

- Link to an external LDAP(S) phonebooks (up to 10)
- XML directories
- XSI directories (BroadSoft)
- Central phone book, hosted by N870
- Search function and reverse lookup online
- Name indication for incoming calls, outgoing calls, missed call list, redial list
- DTMF (SIP Info / RFC 2833, in-band)
- Country specific call progress tones (provisionable)
- CLIP, CNIP: Name indication for incoming calls, outgoing calls, missed call list, redial list
- Name replacement from local phonebook and online directories (auto lookup)
- Calls lists: up to 50 calls (missed, received, dialled)
- XSI Call logs (Broadsoft)
- SIP MWI (Message Waiting Indicator) signalling for voice mail

### Software

- Easy configuration via web browser
- Administrator friendly configuration via configuration file
- User specific Auto-provisioning:
  - via MAC address
  - via XML configuration file
- Firmware upgrade / downgrade
- Backup and restore functions
- Log to external syslog servers

### Hardware

- Wall- or ceiling mountable
- Antenna diversity
- 2 Status LEDs
- Reset key
- Ethernet RJ45 10/100 Mbps
- Power over Ethernet: PoE IEEE 802.3af class 1
- Power saving switch mode power supply (EU or UK)
- Colour: polar white SF9063
- Dimension: 180 mm (H) x 110 mm (W) x 42 mm (D)
- Two-year warranty

### Special features

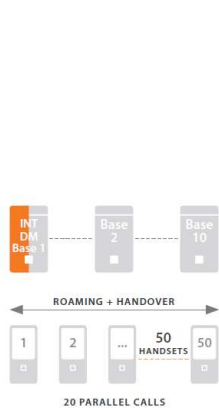
- Broadsoft feature sync (DND and Call Forward)
- Broadsoft phonebook and Call logs
- MWI signalling configurable
- Failover: DNS SRV, Failover server
- Sync over DECT, Sync over LAN or Mixed mode
- Connect DECT sync/a-sync state with SIP registration. (Handset off or out of range / de-register SIP)
- IPUI Provisioning
- xHTML Applications
- Deregister SIP if handset out of range/power down
- uaCSTA
- local 3-Way Conference

## Connectivity

One Hardware for all functions: N870 IP PRO appliance. Function is set by role in the device settings: Integrator, DECT Manager and/or Base station.

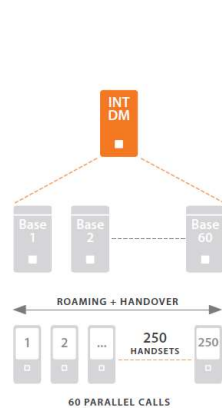
### DECT Multicell System SMALL

Integrator function + DECT manager function = on  
DECT base station function = on



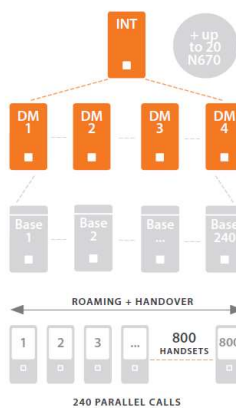
### DECT Multicell System MEDIUM

Integrator function + DECT manager function = on  
DECT base station function = off



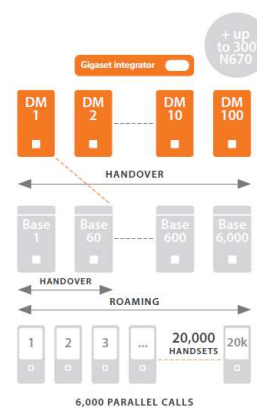
### DECT Multicell System LARGE

Gigaset N870 in „Integrator only“ role  
Gigaset N870 in „DECT Manager“ role  
DECT manager function = on  
DECT base station function = off



### DECT Multicell System ENTERPRISE

Gigaset Virtual Integrator Software  
Gigaset N870 in „DECT Manager“ role  
DECT manager function = on  
DECT base station function = off



<sup>1</sup> In preparation, available at a later date via software update.

<sup>2</sup> Features and functions depend on the SIP-telephone-system. AML features dependent on application server, configuration and handset model. For more info visit [wiki.gigasetpro.com](http://wiki.gigasetpro.com).

# Gigaset N870 IP PRO

## The scalable DECT IP multicell system for seamless mobile communication in SMB and beyond

### Alarm, Messaging, Location (AML) support

- Alarm
  - Handset can establish an alarm call/ alarm event (MQTT)<sup>1,2</sup>
  - Establish an alarm call via function key<sup>2</sup>
  - Lone worker protection (DGUV certified) with Unify OpenStage M3 Plus / M3 Ex Plus handset and tetronik DAKS server
- Messaging
  - Connection of up to 10 application servers (alarm/messaging server) via MQTT interface
  - Send messages to handsets with signalling and indication according to priority (5 priority levels)
  - Specific alerting tones
  - Collect user response via softkeys (up to 10 reply options) and send to alarm server
  - Offer call setup in context of the message response
  - Message inbox
  - SIP messaging for plain text, in use cases without alarm server
- Location
  - Alarm server can retrieve data about DECT environment (RSSI) and Bluetooth beacons<sup>2</sup> from a handset for calculation of exact position

### Service

- Syslog
- PCAP tracing
- SNMPv3
- CLI - Command Line Interface for specific service cases
- Save and Restore
- Base station remote reset by power procedure
- Firmware update from server<sup>1</sup> (file based), automatically updating all base stations
- Visualization Tool

### Gigaset N870 Integrator software

- Central management of up to 100 N870(E) and 300 N670 in different locations

### Technical specifications

- DECT EN 300 175-x
- Standards: GAP / pnCAP
- DECT radio coverage up to 50 m (indoor) and 300 m (outdoor)
- Support of 120 DECT channels
- TLS1.0/1.1/1.2 for HTTPS and SIP, SIPS
- SIP (RFC3261, RFC2396, RFC2976)
- HTTP/Digest Authentication (RFC2617)
- Locating SIP Server (RFC3263)
- Call Transfer (RFC5589, RFC3515, RFC3891, RFC3892)
- MWI (RFC3265, RFC3842)
- SDP (RFC4566, RFC3264, RFC3555)
- RTP (RFC3550, RFC3551, RFC3555, RFC2833), SRTP, RTCP
- IPv4, IPv6, SNTP, DHCP (Option 1, 3, 6, 12, 15, 28, 42, 114, 120), DNS, TCP, UDP, VLAN (IEEE 802.1q), DNS SRV
- 10 simultaneous calls (G.711)
- Codecs G.711, G.722, G.729ab
- VAD/CNG (for G.729ab)
- QoS (RFC2474, RFC2475)
- Approvals: CE

### Platform features

N870E supports many platforms, incl. Broadsoft, Asterisk and 3CX. Visit the [wiki.gigasetpro.com](http://wiki.gigasetpro.com), for the latest overview and status. Features and functions depend on the SIP-telephone-system.

#### General Platform features include:

- Network AM
- Call transfer: attended, un-attended, blind
- Call waiting
- Call hold/toggle/resume
- Call reject
- CLIR
- Call forwarding: CFU, CFNR, CFB
- Distinctive Ring (internal / external / group / door / emergency / optional)
- Auto-provisioning
- Net directories via LDAP(S)
- Group Pick-up

<sup>1</sup> In preparation, available at a later date via software update.

<sup>2</sup> Features and functions depend on the SIP-telephone-system. AML features dependent on application server, configuration and handset model. For more info visit [wiki.gigasetpro.com](http://wiki.gigasetpro.com).

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## Gigaset N870 multicell system components

### Gigaset N870 IP PRO:

Order number: S30852-H2716-R101

### Licenses for central management & branch solution:

N870 Virtual Integrator SW license: S30852-H2716-X1

N670 DECT Manager license: S30852-H2714-X2

N870 DECT Manager license: S30852-H2716-X2

### Power supply

Optional, if no PoE/PoE injector available

- EU: Order-Nr. L36280-Z4-X706
- UK: Order-Nr. L36280-Z4-X745

### Alarm, Messaging, Location (AML) licenses

- Messaging license N670/N870 (license per handset), order number: S30852-H2714-X11
- Location incl. Messaging license N670/N870 (license per handset), order number: S30852-H2714-X21

## Dimensions and weight

### Packaging

- Dimension (L x W x H): 223 x 163 x 65 mm
- Weight: approx. 380 g

### Device

- Colour of the housing: Polar White
- Dimensions (L x W x H) 180 x 110 x 42 mm
- Weight: approx. 220 g

### Environmental conditions

- Protection class IP20 (indoor)
- Operating temp: +5° to +45° C
- Storage temp: -20° to +70° C
- Relative humidity: 20 % - 75 % non-condensation

### Box contents

- Main device
- Security leaflet
- Screws

It's your best choice.

Discover more! Contact your Gigaset sales representative, visit [gigaset.com/pro](https://www.gigaset.com/pro) or the wiki at [wiki.gigaset.com](https://wiki.gigaset.com)

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