# **Gigaset** pro

## 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 handsets and 60 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.

























## 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
  - Up to 60 parallel calls
  - Up to 10 simultaneous calls per base
- The Gigaset Integrator<sup>1</sup> (virtual machine) can combine up to 100 DECT Multicell systems to one large handover and roaming domain
- · Seamless handover and roaming
- · LDAP(S) phonebook
- Professional zero-touch configuration via auto-provisioning
- IPUI based handset registration
- uaCSTA support for CTI-integration<sup>1</sup>
- · XHTML applications by customer
- End-to-end signalling and voice encryption
- LEDs on front for status and visual power check

#### **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 N870 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 or even floors into one large communication network.

#### Connectivity

The N870IP DECT Multicell System is interoperable with many platforms and network providers. All recent professional handsets from Gigaset are compatible with the N870 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, provider profiles and support of standard protocols make configuration extremely easy and fast. The Gigaset N720 SPK (Site Planning Kit) support the reseller to identify the right position for any of the N870 base stations.





<sup>&</sup>lt;sup>1</sup> In preparation, available at a later point in time

## Gigaset N870 IP PRO

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#### Technical data:

#### Phonebook and dialling

- Link to an external LDAP(S) phonebooks (up to 10)
- Search function and reverse lookup online
- vCard support
- Barring of calls (black 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)
- List of up to 50 calls (missed, received, dialled)
- 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)<sup>2</sup>
- Colour: polar white SF9063
- Dimension: 180 mm (H) x 110 mm (W) x 42 mm (D)
- · Two-year warranty

#### Special features

- up to 250 accounts (1 for each user)
- 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
- uaCSTA<sup>3</sup>
- local 3-Way Conference<sup>3</sup>

## Connectivity

#### **Small sized DECT Multicell System**

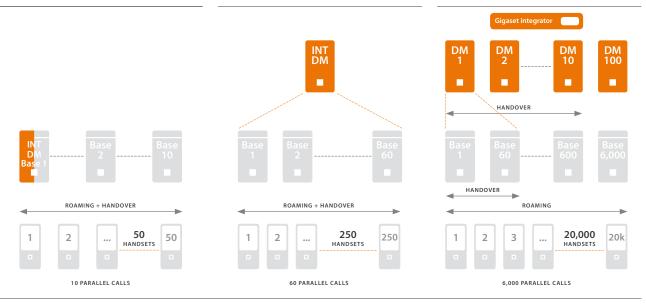
Embedded Integr. + DECT man. function = on DECT base station function = on

#### **Medium sized DECT Multicell System**

Embedded Integr. + DECT man. function = on DECT base station function = off

#### Large - XXL<sup>3</sup> DECT Multicell System

DECT manager function = on,
DECT base station function = off



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#### 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, file based, scheduled, automatically updating all base stations
- Virtualisation Tool

#### Gigaset Integrator<sup>4</sup>

- Software / Virtual Machine to combine multiple N870IP Multicell Systems to one large roaming domain
- Combines Multicell Systems with DECT manager activated
- Ensures handover and roaming between all DECT Managers
- Combine any Small and Medium sized installation to a Large, Extra Large or even an Extra Extra Large configuration. So infact serving the market from a SOHO, SME to Large Enterprises.
- Details on the complete system in total:
  - Up to 20,000 users / SIP accounts / handsets
  - Up to 6,000 base stations
  - Up to 6,000 parallel calls

#### 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<sup>5</sup>, SNTP, DHCP (Option 1, 3, 6, 12, 15, 28, 42, 114, 120), DNS, TCP, UDP, VLAN (IEEE 802.1q)
- DNS SRV
- 10 simultaneous calls per base (G.711), 8 simultaneous calls per base (G.729ab codec ) up to 5 calls with wideband audio (G.722)

- Codecs G.711, G.722, G.729ab
- VAD/CNG (for G.729ab)
- QoS (RFC2474, RFC2475)
- Approvals: CE

#### Platform features

The N870 system supports many platforms, incl. Broadsoft and Asterisk. Visit the wiki for the latest overview and status. General Platform features include:

- Network AM
- · Call transfer: attended, un-attended, semi-attended, blind
- · Call waiting
- · Call hold/toggle/resume
- · Call reject
- · CLIR
- · Call forwarding: CFU, CFNR, CFB
- · Distinctive Ring (Internal/External)
- · Auto-provisioning
- Net directories via LDAP(S)
- · Group Pick-up

#### Dimensions and weight

#### **Packaging**

- Dimensions (l x w x h), 182.3 x 113.1 x 42.2 mm
- Weight approx.: 380 gram

#### Device

- · Colour of the Housing: White
- Dimensions (l x w x h), 180 mm (H) x 110 mm (W) x 42 mm (D)
- Weight approx.: 220 gram

#### 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

<sup>4</sup> Contact the local Gigaset Team for more information or visit the wiki.
5 Available in later stage via software update. Visit the wiki for more information.

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#### Gigaset N870 Multicell System components

#### **Gigaset N870IP PRO**

One Hardware concept, usable in different modes:

- Up to 6,000 N870 appliances in base station mode
- Up to 100 N870 appliances in DECT manager mode Order number: S30852-H2716-R101

#### Gigaset Integrator 6

- · Virtual Integrator for VMWare®
- · License based model
- 6 In preparation, available at a later point in time. Contact the local Gigaset Team for more information or visit the wiki.

#### Gigaset N720 SPK PRO7

- This Site Planning Kit is recommended for the multicell site analysis and planning. The kit includes two calibrated handsets (Gigaset S650H) and one Gigaset N720 SPK PRO base station.
- Measurement of RSSI values Order number: S30852-H2316-R101

#### Power supplies

- · Optional, if no PoE/PoE injector available
- EU: Order Nr. L36280-Z4-X706
- UK: Order Nr. L36280-Z4-X745

7 Equally usable for N870 & N720 measurements

#### Compatible DECT Endpoints from the Professional Series



#### S650H

- · Comfort-edition
- · Navi-key operation
- HD Audio and HD Voice
- Handsfree
- Auto-provisioning via IPUI
- Talktime 12h, standby 300h
- Resistant to scratches / disinfectants



#### R650H

- · Active-edition
- IP65; shock, dust and water jets resistant
- Large TFT display
- · Rubber surface
- Auto-provisioning via IPUI
- Talktime 14h, standby 320h



#### SL750H

- Micro-edition
- Large TFT 2.4" Display
- Bluetooth
- Resistant to scratches / disinfectants
- Auto-provisioning via IPUI
- Talktime 12h, standby 250h



#### Maxwell C

- · DECT, as a handset
- · Large TFT 2.8" Display
- 8 direct dial keys
- Bluetooth and wired handset connection
- Auto-provisioning via IPUI
- · Netadapter powered

### It's your best choice.

Gigaset's new professional line provides businesses with tailor-made, communication-enhancing phone systems. Discover more! Contact your Gigaset representative, visit **gigasetpro.com** or the wiki at **wiki.gigasetpro.com**