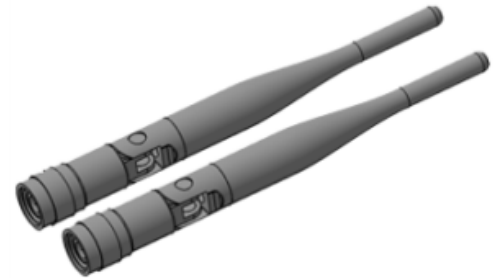


# N870E - Antennas

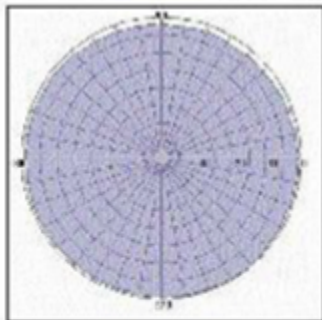
## Introduction

For installations in special environments the antenna angle and orientation can be changed to improve radio wave propagation and to reduce interferences or reflections. The two detachable external antennas are adjustable at 45°-90° angles. N870E has 2 TNC connectors which are also suitable for third-party antennas. The N870E is based on the same hardware and software and has the same features and upgrade possibilities as the Gigaset N870IP PRO multicell. The N870E can be used in mixed mode with the standard N870IP multicell.

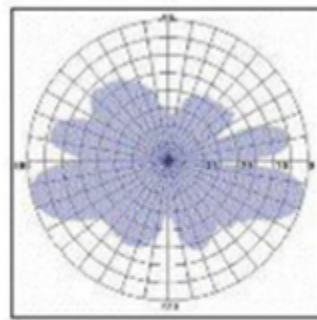


The N870E preferred antenna position is vertical like above.

Antenna characteristics:



Horizontal Direction



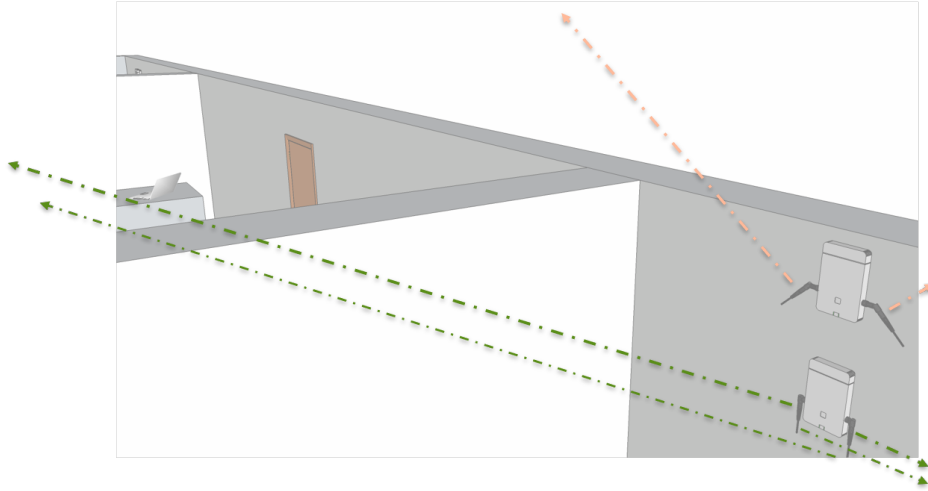
Vertical Direction

Antenna position:

- The strongest DECT signal from a dipole antenna is at right angles to the dipole
- This stronger DECT signal should run directly into the room to be covered
- This stronger DECT signal should not be reflected indirectly into the target room via a neighboring metal surface
- The movable, align able antennas make it possible to improve the DECT signal depending on the mounting orientation of the housing
- However, the optimal alignment of the antennas can only be determined by a DECT measurement

Below an example why in normal situations the vertical antenna position is the preferred antenna position.

- The strongest DECT signal covers the working area/ floor where the users are located/walking around
- An antenna angle towards the ceiling creates less coverage on the area the users/DECT base stations are located, the strongest DECT signal is send to the other floors



- It is an misunderstanding that an external antenna has more DECT range then an internal antenna
- The possibility to change the antenna position can improve the DECT range and reduce interferences or reflections
- A wrong antenna position can also cause less DECT range and even call interruptions

More information about output power/cable loss can be found here: [FAQ - External antennas - output power / cable loss](#)

### Third party antennas

Instead of the Gigaset external antennas, you can connect also third party antennas.

Gigaset does not sell these antennas !!!

**HUBER+SUHNER**

