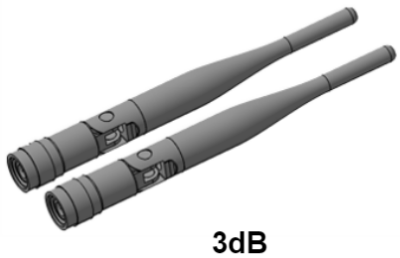
FAQ - External antennas - output power / cable loss

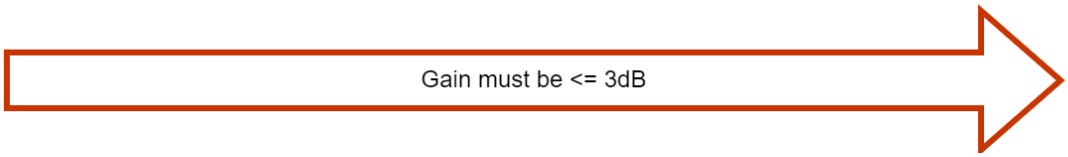
Valid for:	~~N610~~	~~N670~~	~~N870~~	N870E	~~Embedded Integrator~~	~~Virtual Integrator~~

Introduction

The Effective radiated power from an Gigaset N870E with the Gigaset delivered Antennas (3dB) is compliant with the German / European regulations for the DECT radiated power. Check your own country regulations.



3dB



When using an external antenna, the formula **Antenna gain - cable loss <= 3dB** is still valid.

Reduce power with 5 dB

8 dB

We need to reduce the power with 5dB to match the European regulations.

Cable dB gain loss

The cable loss depends on:

- Cable type
- Cable Length
- Cable diameter

Examples:

Type	Diameter	Loss
RG223	5.4 mm	Loss/100m: 60 dB
RG174/U	2.8 mm	Loss/100m: 142dB
Aircell 5	5 mm	Loss/100m: 45 dB
Aircell 7	7 mm	Loss/100m: 21 dB
Ecoflex 15	15 mm	Loss/100m: 16 dB

Example:

Using 5 meter RG223 cable = 3 dB loss

Antenna gain - cable loss <= 3dB

8 dB - 3 dB = 5 dB is still 2 dB to high.

The signal strength can be further reduced by external hardware or by the system: FAQ - Base stations Edit