HUBER+SUHNER

SENCITY® Spot-S Railway Cellular Antenna 1318.17.0015

Directional, planar, linear vertical polarized antenna with 8 dBi Gain (max.)
Cellular and DECT bands between 1710 and 1980 MHz
Approved according to EN 50155, EN 50125-3 railway and EN 60068 standards
Fire retardant acc. to EN 45545-2, DIN 5510-2 and BS 6853
For outdoor and indoor applications
Ingress protection IP 66 and IP 67
Wall mounting material included

Connector	N, jack (female)
Polarization	vertical
DC grounded	No

70 €

SENCITY® Spot-S indoor Antenna 1319.26.0027

SENCITY Spot-S planar indoor DECT antenna
Polarisation: dual linear, ±45° slant
Polarisation diversity
Working range: 1880 to 1930 MHz
Half power beamwidth: 75° / 85° (vert./ hor.) 8 dBi Gain
Wall mounting socket included

Connector	TNC, jack (female)
Polarization	-45° slant +45° slant
DC grounded	No

68 €

SENCITY® Spot-S indoor Antenna 1319.19.0003+0004

SENCITY Spot-S planar indoor DECT antenna
Polarisation: linear vertical (0003), circular (0004)
Working range: 1850 to 1990 MHz
Half power beamwidth: 65° / 85° (vert./ hor.) 8 dBi Gain
Wall mounting socket included

Connector	SMA, jack (female)
Polarization	linear
DC grounded	No

46 €

SENCITY Omni-L DECT Antenna 1319.17.0121

Omni - directional stick antenna for DECT applications
1880 to 1930 MHz
Gain 7 dBi, vertical polarized antenna
Ingress protection IP67 (IEC 60529)
For outdoor and indoor applications
Pole or wall mount

Connector	N, jack (female)
Polarization	vertical
DC grounded	Yes

94 €

Dämpfungswerte Koaxialkabel

Hinweis: die Kabeldämpfung kompensiert den Antennengewinn

Bezeichnung	Durchmesser	Dämpfung@2GHz/100m	Anschlusstyp
RG174/U	2,8 mm	142 dB	SMA/BNC
Aircell 5	5 mm	45 dB	SMA/BNC/TNC/N
Aircell 7	7 mm	35 dB	BNC/TNC/N
Ecoflex10	10 mm	21 dB	BNC/TNC/N
Ecoflex 15	15 mm	16 dB	BNC/TNC/N

Beispiele: Kabeltyp abhängig von den Anforderungen zu wählen
(Dämpfung, Durchmesser, Biegeradius, Schirmdämpfung, Temp.-bereich…)

External Antenna Measurement Results for the OpenScape DECT Base Station

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GC TO HD RF
January 2021
Update Nov22

GIGASET. INSPIRING CONVERSATION.
MADE IN GERMANY

Overview

The goal of this measurement campaign was to confirm the data of the antenna manufacturer in a real environment connected to a DECT base station via a coaxial cable of a defined length.

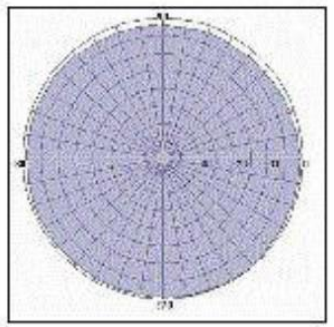
It was found that the antenna diagrams were nearly identical and the measured gain matches quite well with the datasheets .

Therefore it can be assumed that by compensating the antenna gain with a minimum cable loss or additionally reducing the transmit output power by a few dB (if low loss cable is used) the radiated transmit power will stay below the national regulatory requirements (26 dBm EIRP/24dBm ERP).

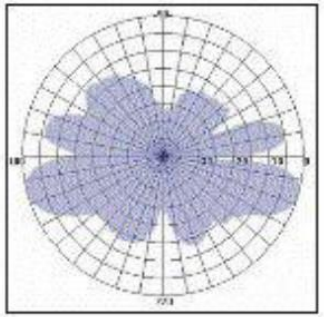
Basic Configuration

Datasheet:

Antenna diagram



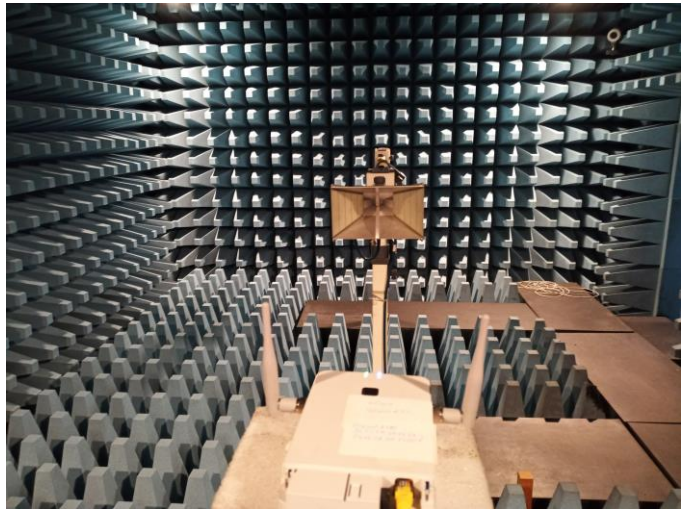
Horizontal Direction



Vertical Direction

Electrical characteristic

Frequency range (MHz)	1880 - 1930
Input impedance (Ω)	50
V.S.W.R	≤ 1.5
Gain (dBi)	3
Protect raiden	Direct current
Polarisation type	Vertical
Max. input power (W)	50
Connector:	TNC



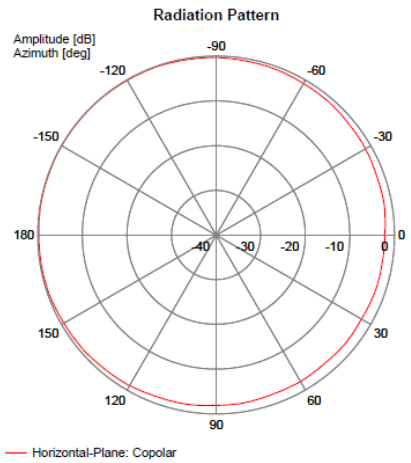
Measured values:

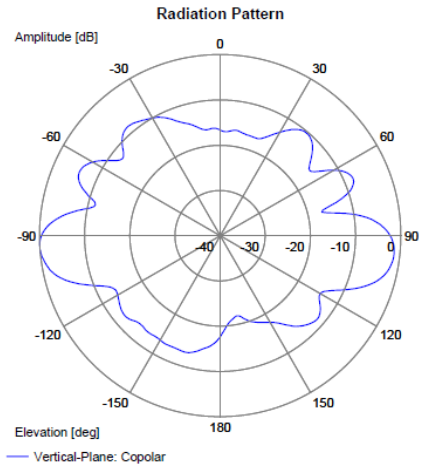
Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	25,5 dBm EIRP
Antenna Gain:	3,1 dBi

Omni-L DECT Antenna

Datasheet:

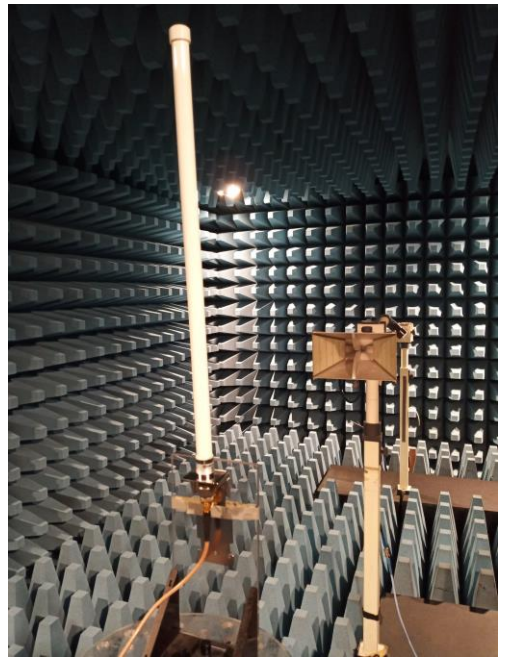
Antenna diagram





Electrical characteristic

Frequency range (MHz)	1880 - 1930
Input impedance (Ω)	50
V.S.W.R	≤ 1.5
Gain (dBi)	7
Polarisation type	Vertical
Max. input power (W)	25
DC grounded	yes
Type:	1319.17.0121
Connector	N-jack female



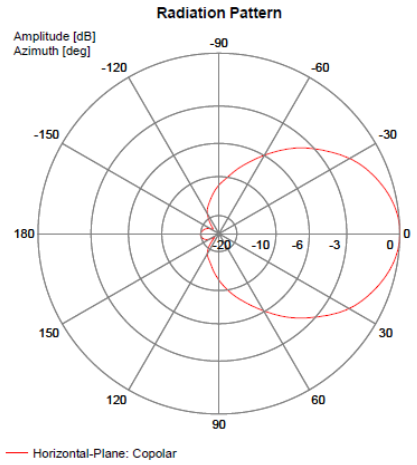
Measured values:

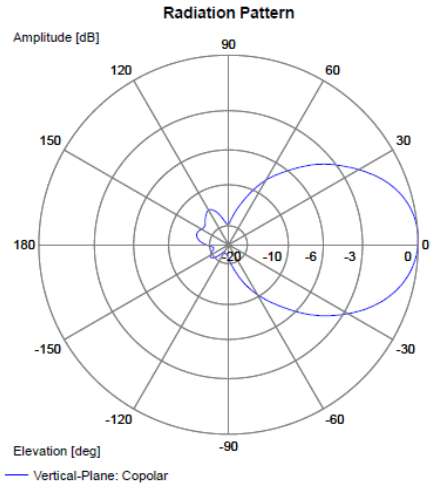
Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	29,3 dBm EIRP
Antenna Gain:	6,9 dBi

Directional Planar Antenna (outdoor)

Datasheet:

Antenna diagram





Electrical characteristic

Frequency range (MHz)	1755 - 1910
Input impedance (Ω)	50
V.S.W.R	≤ 1.5
3dB beamwidth (v) (°)	70
Gain (dBi)	8
Polarisation type	Vertical
Max. input power (W)	50
DC grounded	no
Type:	1318.17.0015
Connector	N-jack female

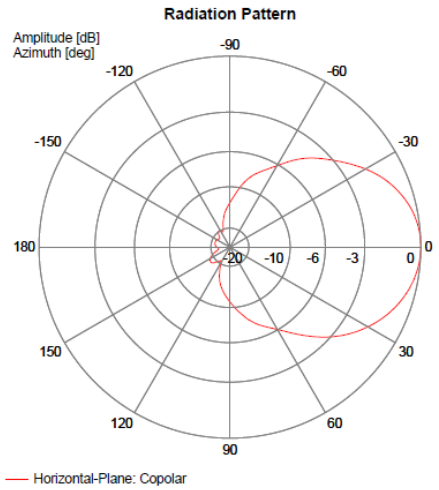
Measured values:

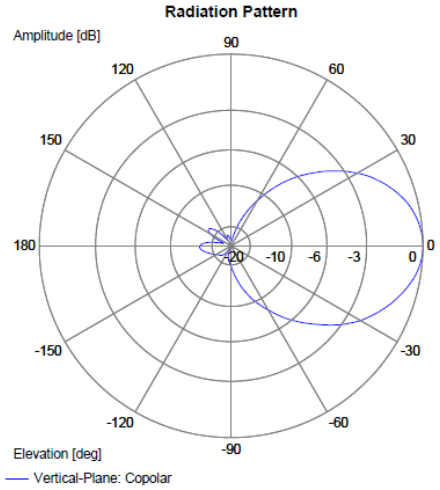
Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	29,7 dBm EIRP
Antenna Gain:	7,3 dBi

Directional Planar Antenna (indoor)

Datasheet:

Antenna diagram





Electrical characteristic

Frequency range (MHz)	1850 - 1990
Input impedance (Ω)	50
3dB beamwidth (v) (°)	65
Gain (dBi)	8
Polarisation type	Vertical
Max. input power (W)	10
DC grounded	no
Type:	1318.17.0003
Connector	SMA-jack female

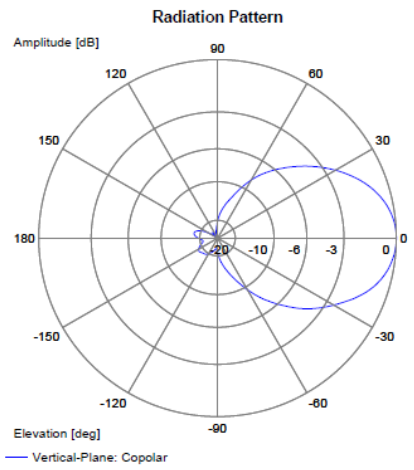
Measured values:

Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	29,9 dBm EIRP
Antenna Gain:	7,5 dBi

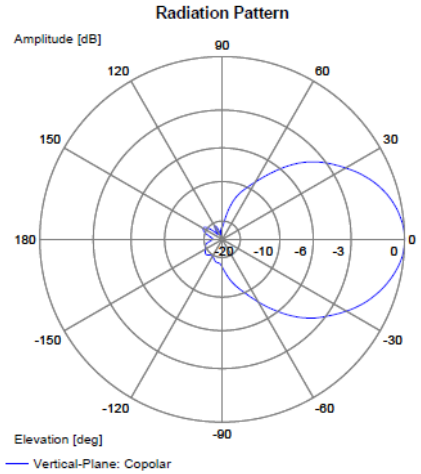
Directional Planar Antenna (dual, indoor)

Datasheet:

Antenna diagram



Auslenkung: links



rechts

Electrical characteristic

Frequency range (MHz)	1880 - 1930
Input impedance (Ω)	50
3dB beamwidth (v) (°)	75
Gain (dBi)	8
Polarisation (°)	+/- 45
Max. input power (W)	10
DC grounded	no
Type:	1318.17.0027
Connector	2 x SMA-jack female

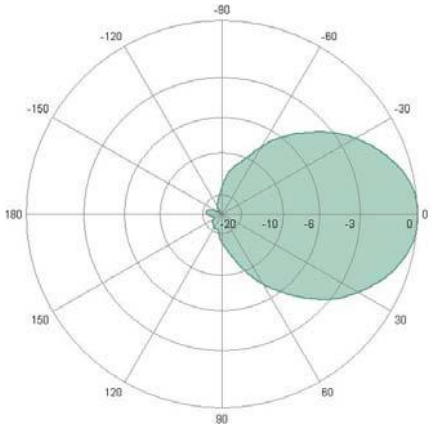
Measured values:

Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	29,4 dBm EIRP
Antenna Gain:	7,0 dBi

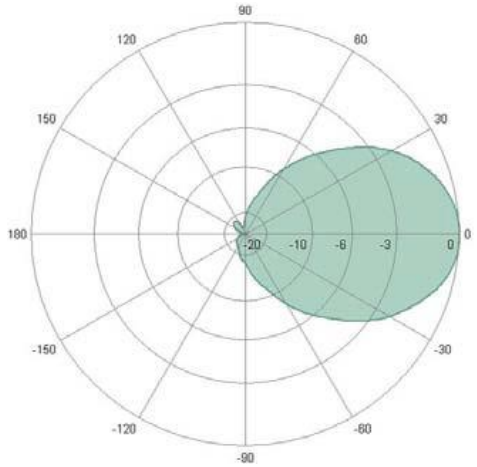
Directional Planar Antenna (indoor)

Datasheet:

Antenna diagram



horizontal



vertical

Electrical characteristic

Frequency range (MHz)	1850 - 1990
Input impedance (Ω)	50
3dB beamwidth (v) (°)	70
3dB beamwidth (h) (°)	70
Gain (dBi)	8
Polarisation (°)	circular, left
Max. input power (W)	10
DC grounded	no
Type:	1319.19.0004
Connector	SMA-jack female

Measured values:

Transmit output power @ TNC-port:	22,4 dBm
Radiated Power:	29,6 dBm EIRP
Antenna Gain:	7,2 dBi

Required Power Reduction

Pout < 22,5dBm

cable loss

Antenna gain 8 dBi

Regulatory requirements (Germany):
Pout < 24 dBm ERP

Pout < 26 dBm EIRP

Gain <= 3 dB

Conclusion:

antenna gain - cable loss <= 3 dB or
antenna gain - cable loss - base power reduction <= 3 dB