



HIRSCHMANN MOBILITY

**Cellular/ GNSS
Adhesive Antenna**

CGN 7026 LP A

Part Number 920-625-001

Features

- Combination antenna for positioning and data-services
- Terrestrial based transmission and satellite-based positioning
- Embedded high performance LNA with dual feed ceramic patch antenna and phase shift network for optimized cross polarization discrimination(XPD)
- Mounting by adhesive foam pad on metallic and non metallic ground as well as on glass
- Designed for installation in harsh environment

Some technical optimization with minor effect to the overall performance of this product are still pending. This document will be updated according the finalization of the optimization measures without prior information.

Technical Data

Dimensions	121 mm x 77 mm x 37 mm
Weight	ca. 230 g
Temperature range	-40°C - +85°C
Protection class	IP6k6 (acc. ISO 20653)
Cable type	RG 174

Technical Data

Cellular	
Frequency range	Low: 698 - 960 MHz High: 1710 - 2690 MHz
Services	2G: GSM 850/900 MHz GSM 1800/1900 MHz 3G: UMTS 4G: LTE-bands (1 - 10; 12 - 20; 23, 25; 26 - 30; 33 - 41; 44)
Impedance	50 Ohm
Load capacity	max. 10 W pulsed acc. GSM standard
VSWR	≤ 2.0
Gain	0 dBi ¹⁾
Load capacity	max. 10 W pulsed acc. GSM standard
Diagnostic resistor	10 kOhms
GNSS	
Frequency range	GPS: 1563 - 1587 MHz (L1) QZSS: 1563 - 1587 MHz (L1) Galileo: 1559 - 1591 MHz (E1) BeiDou: 1559 - 1591 MHz (B1C) GLONASS: 1593 - 1610 MHz (G1)
Impedance	50 Ohm
VSWR	≤ 2.0
Gain	1 dBic ²⁾
Amplification	27 ±1 dB
Noise figure (50 Ohm)	≤ 2.2 dB
Voltage supply	3.0 - 5.5 VDC (remotely fed)
Current consumption	24 ±1 mA @ 5 V

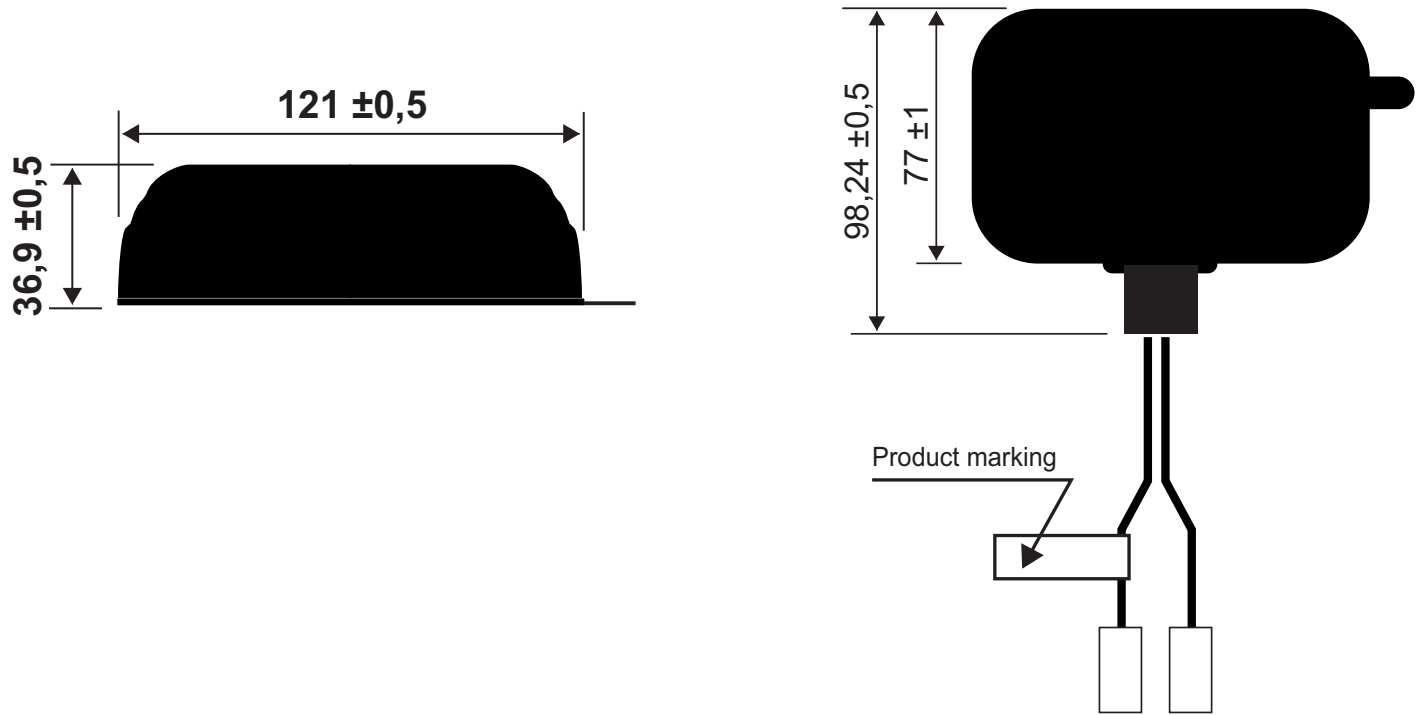
¹⁾ dBi: referenced to an isotropic radiator

²⁾ dBic: referenced to an isotropic radiator, circular polarization

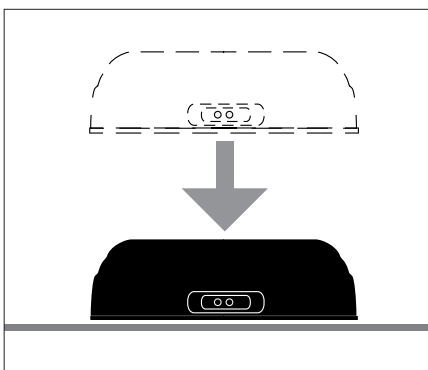
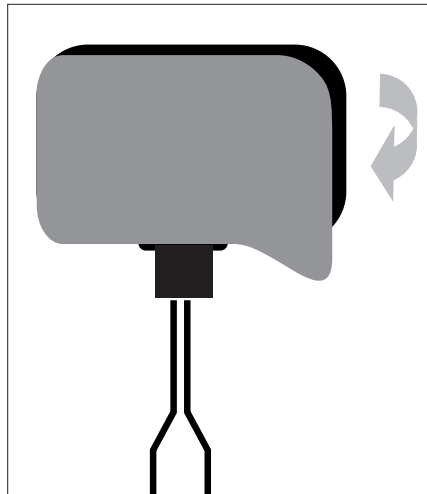
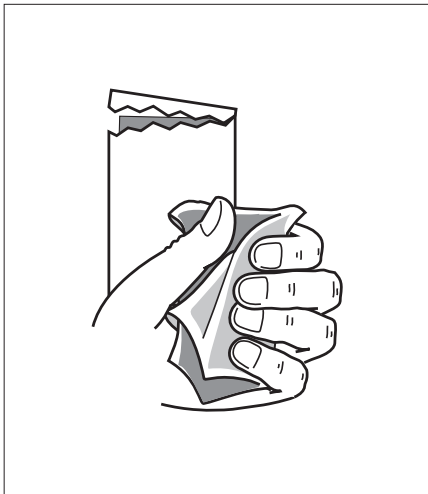
Versions

PN	Description	CELL	GNSS
920-625-001	CGN 7026 LP A	3000 ±40 mm FAKRAf, D bordeaux	3000 ±40 mm FAKRAf, C blue

Technical Drawing

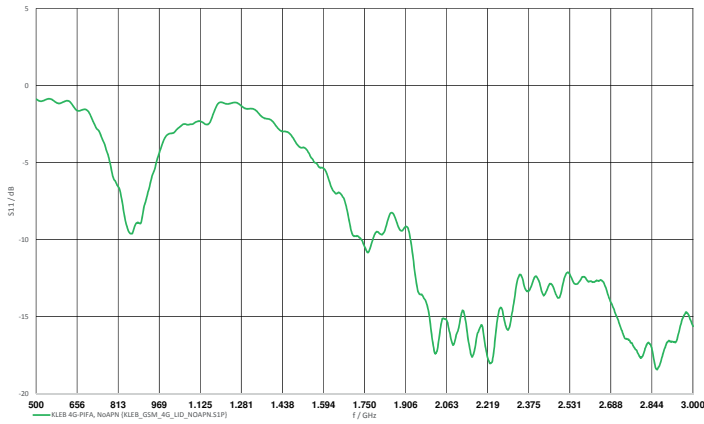


Installation

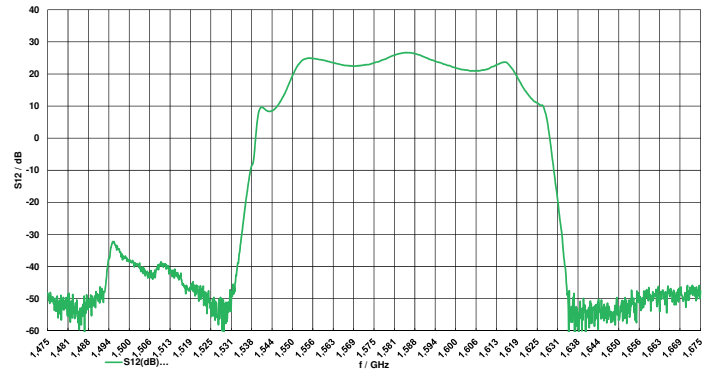


Antenna diagrams

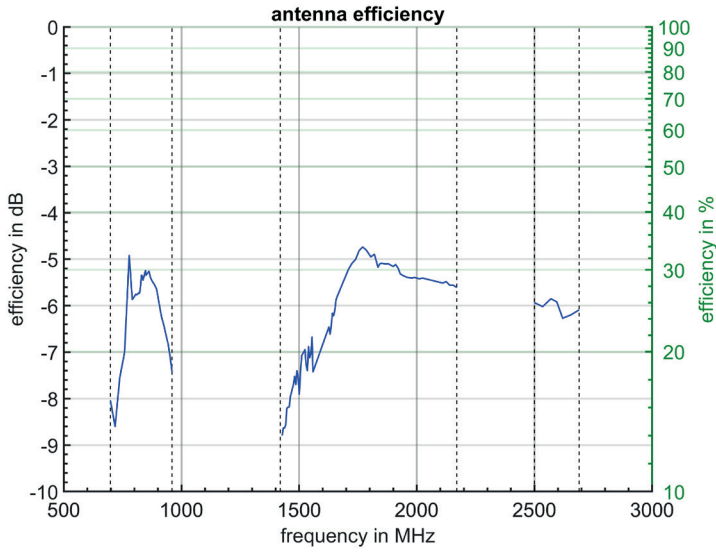
Typ. VSWR (S_{11}) Cellular bands



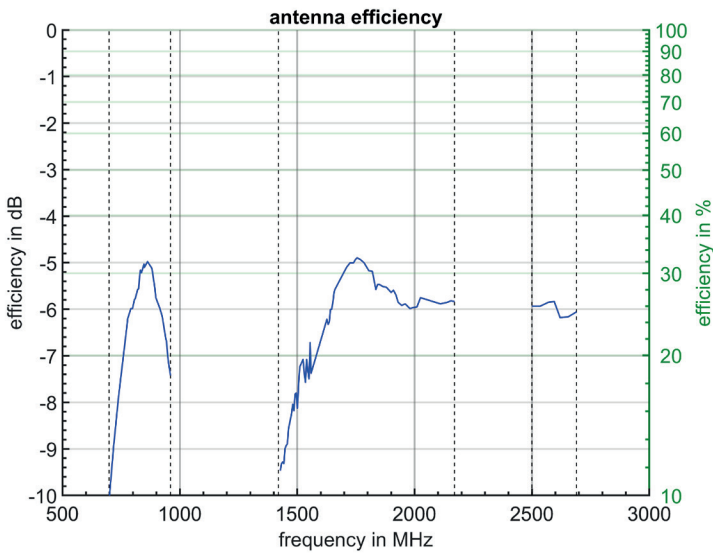
Typ. Gain (S_{12}) GNSS-LNA



Efficiency CELL
Conductive Ground plane



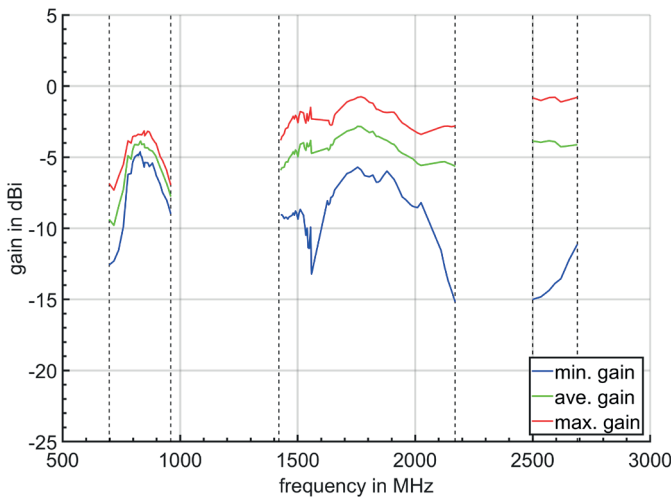
Non Conductive Ground plane



Gain CELL

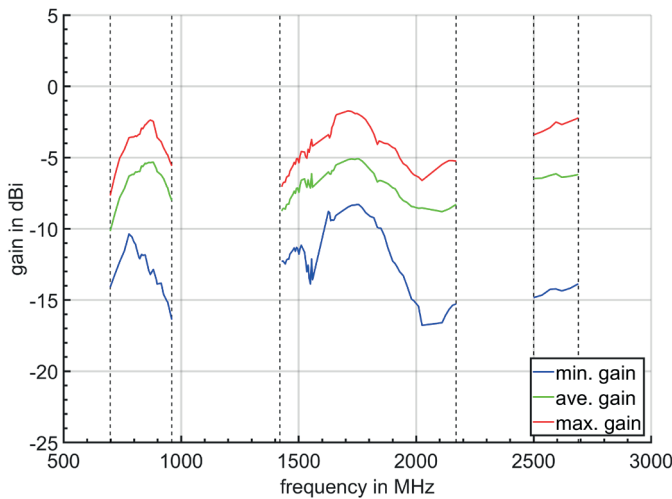
Conductive Ground plane

partial average antenna gain (Theta=[60.00 - 90.00]° ; Phi=[0.00 - 360.00]°)
 E_Total, Theta - linear w. spherical area consideration, Phi - linear



Non Conductive Ground plane

partial average antenna gain (Theta=[60.00 - 90.00]° ; Phi=[0.00 - 360.00]°)
 E_Total, Theta - linear w. spherical area consideration, Phi - linear



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