



HIRSCHMANN MOBILITY

**Cellular/ GNSS
Adhesive Antenna**

CGN 1890 LP LC P/Series

Part Number 602-440-XXX

Features

- Reception antenna for satellite signals for processing in navigation systems, fleet management systems, traffic guidance systems and vehicle location in combination with low profile cellular phone antenna
- Low body height ca. 20 mm
- Coverage of European and American cellular phone frequencies
- Mounting on several surfaces (e.g. glass, plastics, metal ...)

Technical Data

Dimensions (without rod)	102 mm x 66 mm x 20 mm
Weight	-001/ -004: 165 g -002/ -003: 219 g -005: 215 g -006: 139 g
Temperature range	-40°C - +85°C
Protection class	IP66 (acc. IEC 60529)
Cable type	RG 174

Technical Data

Cellular	
Frequency range	Low: 824 - 960 MHz High: 1710 - 2170 MHz
Services	2G: GSM 850/900 MHz GSM 1800/1900 MHz 3G: UMTS
Impedance	50 Ohm
VSWR	≤ 2.0
Gain	0 dBi ¹⁾
Load capacity	max. 10 W pulsed acc. GSM standard
Diagnostic Resistor	10 kOhm
GNSS	
Frequency range	GPS: 1.57542 GHz ± 1.023 MHz (L1-band) QZSS: 1563 - 1587 MHz (L1) Galileo: 1559 - 1591 MHz (E1) GLONASS: 1602.0 - 1614.94 MHz
Impedance	50 Ohm
VSWR	≤ 2.0
Gain	1 dBic ²⁾
Amplification	27 ±1 dB
Noise figure (50 Ohm)	≤ 1.4 dB
Voltage supply	2.7 - 5.5 VDC (remotely fed)
Current consumption	typ. 13 mA @ 5 VDC

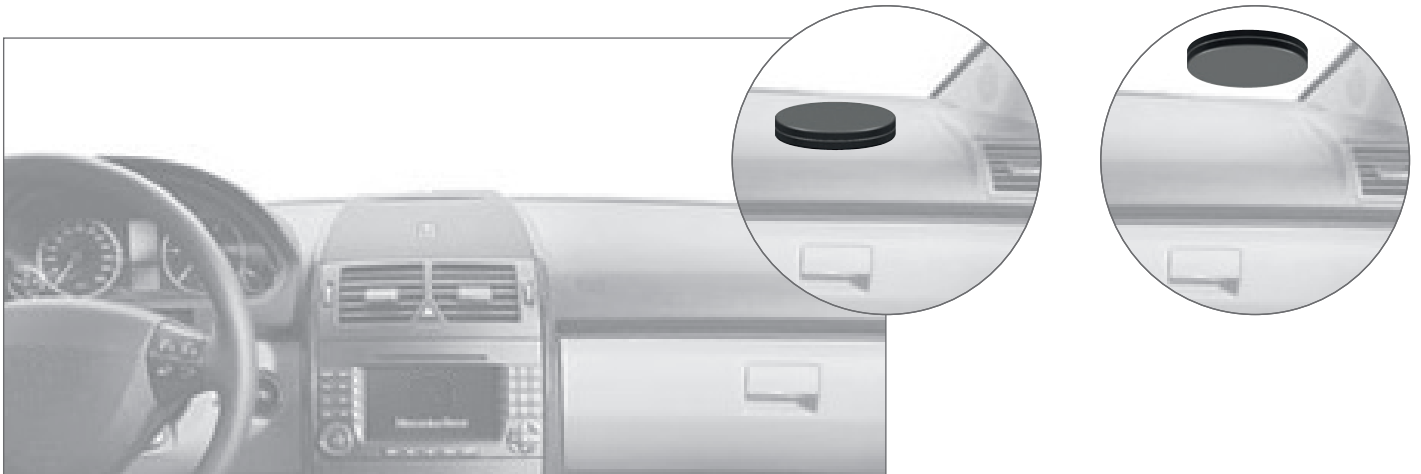
¹⁾ dBi: referenced to an isotropic radiator

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

Versions

PN	Description	CELL	GNSS
602-440-001	CGN 1890 LP LC P/SMA/FME/3.0	3000 +30 mm FMEf	3000 +30 mm SMAm
602-440-002	CGN 1890 LP LC P/SMA/SMA/4.7	4700 +50 mm SMAm	4700 +50 mm SMAm
602-440-003	CGN 1890 LP LC P/FAKRA/5.0	5000 +50 mm FAKRAf, D bordeaux	5000 +50 mm FAKRAf, C blue
602-440-004	CGN 1890 LP LC P/FAKRA/3.0	3000 +30 mm FAKRAf, D bordeaux	3000 +30 mm FAKRAf, C blue
602-440-005	CGN 1890 LP LC P/SMA/5.0	5000 +50 mm SMAm	5000 +50 mm SMAm
602-440-006	CGN 1890 LP LC P/SMA/3.0	3000 +30 mm SMAm	3000 +30 mm SMAm

Installation

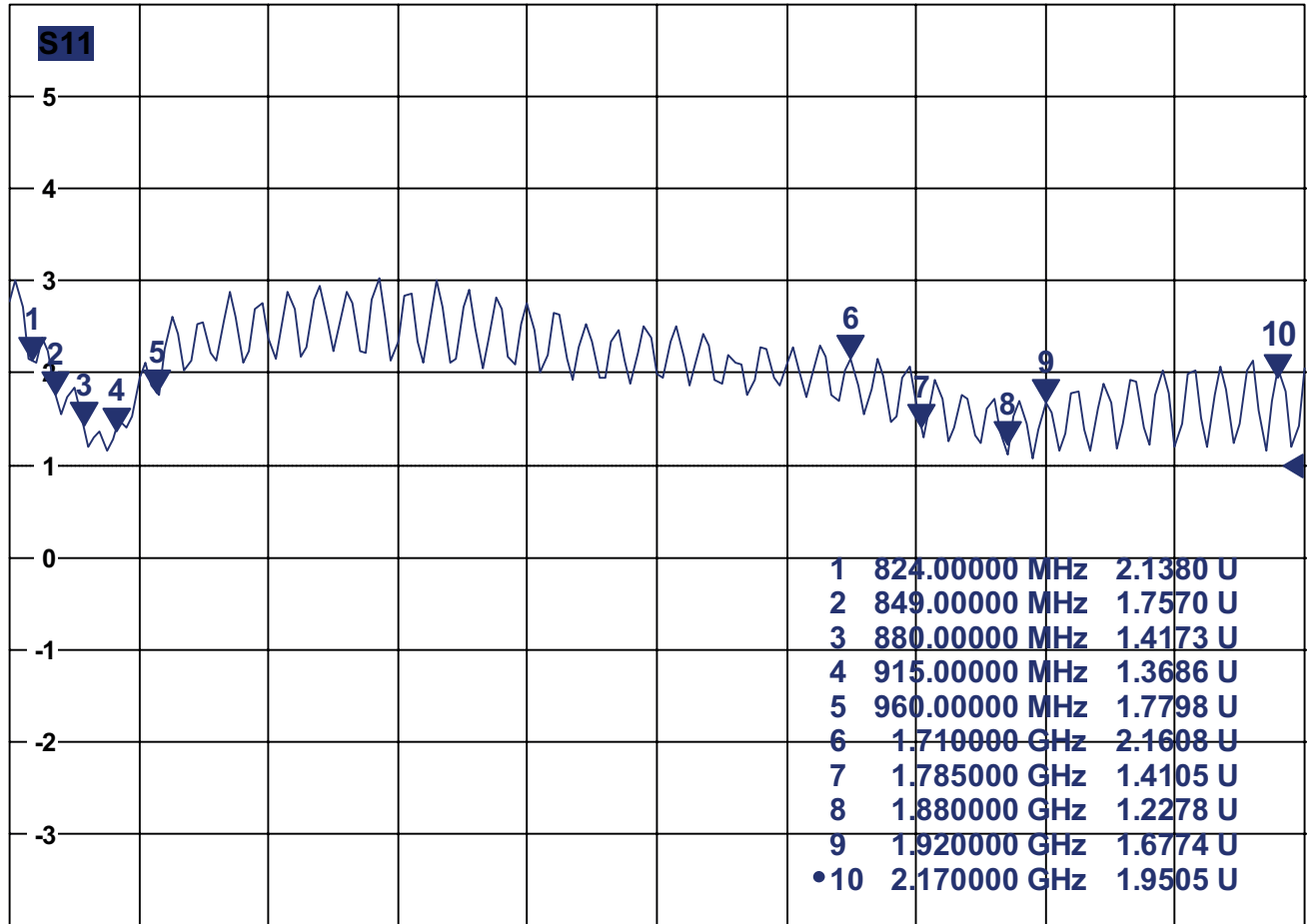


Antenna diagrams

Typ. VSWR

Trc1 **S11** SWR 1 U/ Ref 1 U Cal

1



Ch1 Start 800 MHz

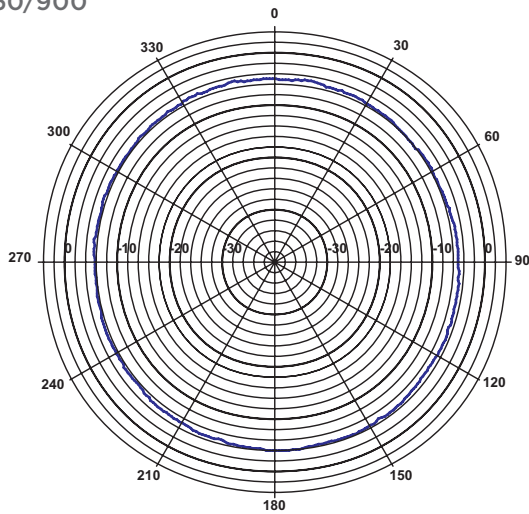
Pwr 0 dBm

Stop 2.2 GHz

Antenna diagrams

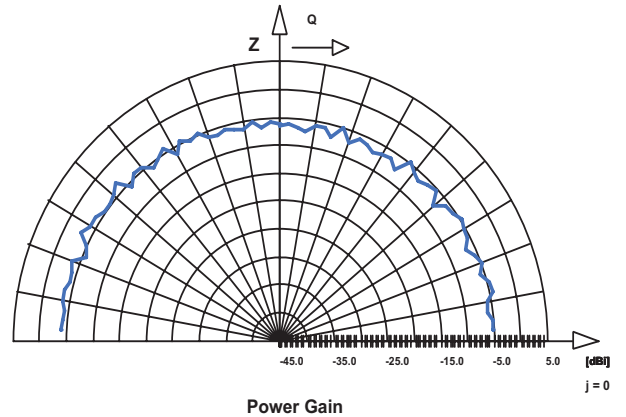
Horizontal / Azimuth

GSM 850/900

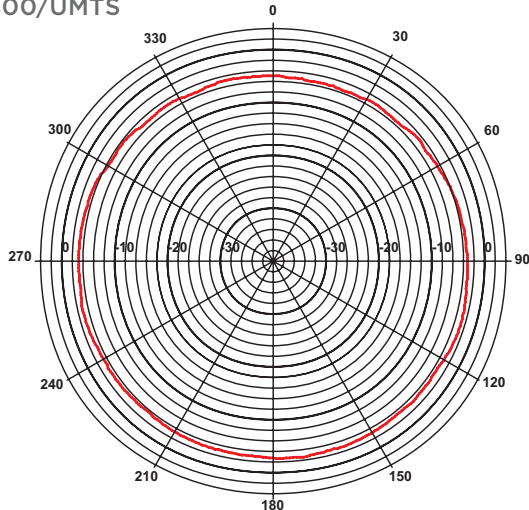


Vertikal / Elevation

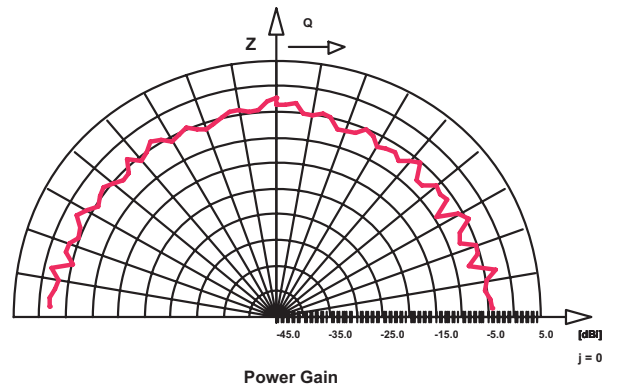
GSM 850/900



GSM 1800/UMTS



GSM 1800/UMTS



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