



HIRSCHMANN MOBILITY

Cellular/ GNSS

Adhesive/ Magnetic Antenna

GPS 1890 LP P/Series

Part Number 920-061-XXX

Features

- Low Profile antenna
- Reception antenna for GNSS 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. 21 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	ca. 151 g
Temperature range	-40°C - +80°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
Gain	0 dB _i ²⁾
Polarization	linear, vertical
Load capacity	max. 10 W pulsed acc. GSM standard
Connector 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)
Impedance	50 Ohm
VSWR	≤ 2,0
Gain	2 dB _i ¹⁾
Polarization	RHCP
Amplification	27 ± 3 dB
Noise figure (50 Ohm)	< 2.5 dB
Voltage supply	3 - 5.5 VDC (remotely fed)
Current consumption	< 25 mA at 5 V

¹⁾ dB_i: referenced to an isotropic radiator, circular polarization

²⁾ dB_i: referenced to an isotropic radiator

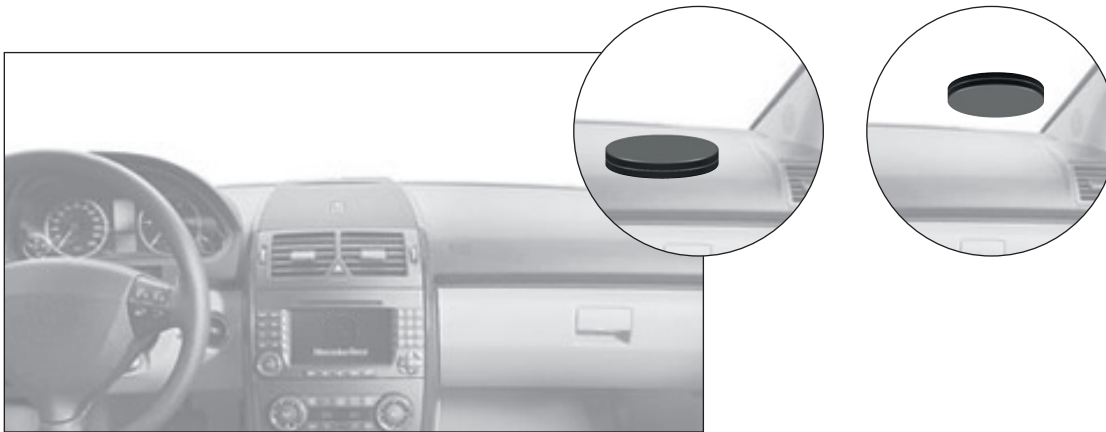
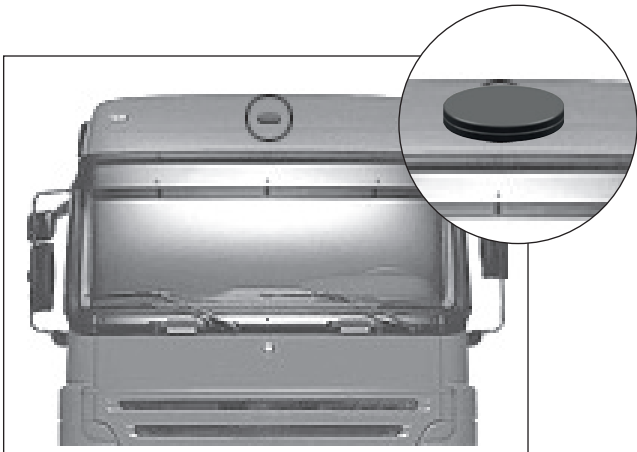
Versions

PN	Description	CELL	GNSS
920-061-301	GPS 1890 LP P/SMB/FME/3.0	3000 +30 mm FMEf	3000 +30 mm SMBf
920-061-302	GPS 1890 LP P/SMA/FME/3.0	3000 +30 mm FMEf	3000 +30 mm SMAM
920-061-304	GPS 1890 LP P/SMA/SMA/3.0	3000 +30 mm SMAM	3000 +30 mm SMAM
920-061-305	GPS 1890 LP P/FAKRA/3.0	3000 +30 mm FAKRAf, D bordeaux	3000 +30 mm FAKRAf, C blue

Other Cable lengths and Connectors on request

Magnetic adhesive pad optional separat available with part-no. 821-049-001

Installation

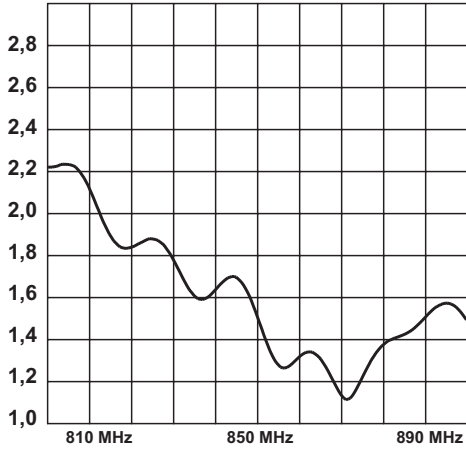


Installation on ground plane

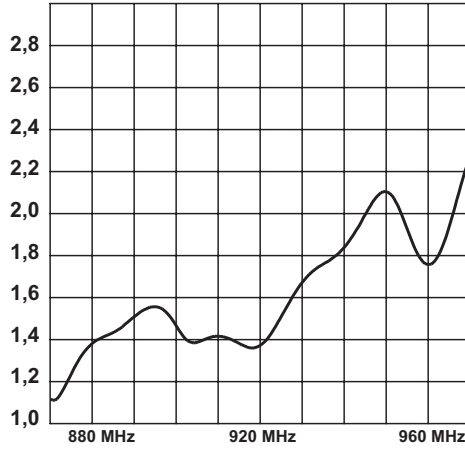
Antenna diagrams

Typ. VSWR

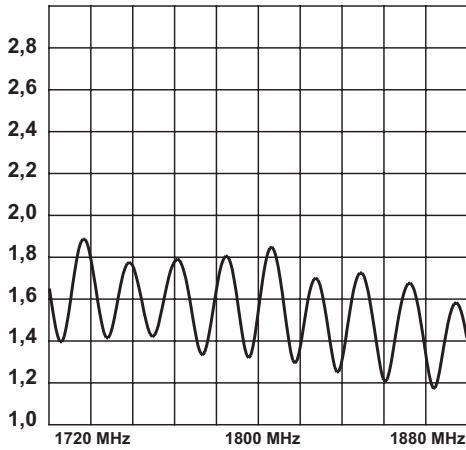
GSM 850



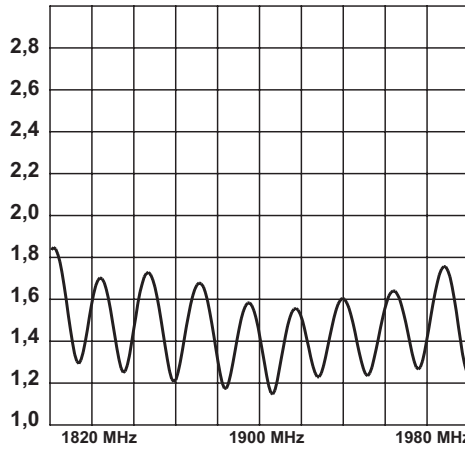
GSM 900



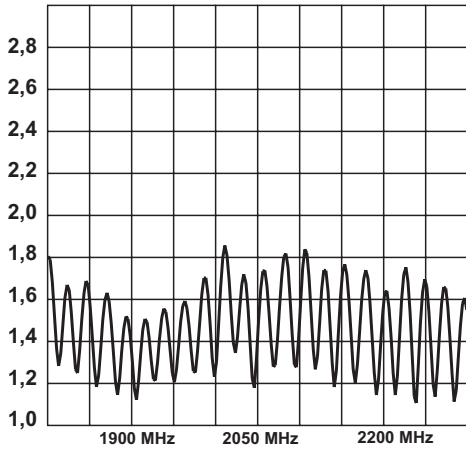
GSM 1800



GSM 1900



UMTS

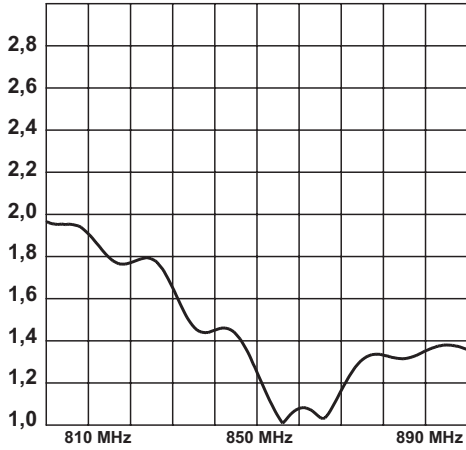


Installation stick on glass

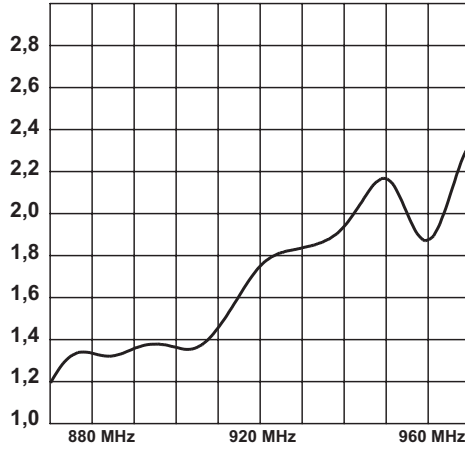
Antenna diagrams

Typ. VSWR

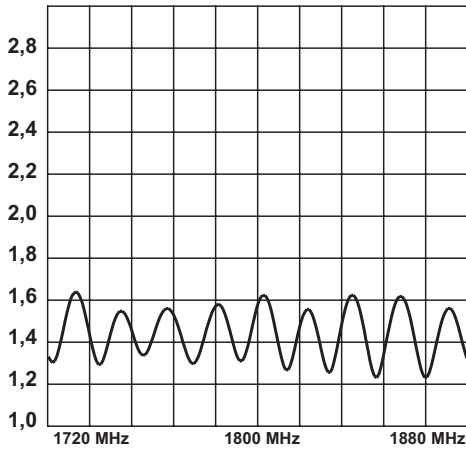
GSM 850



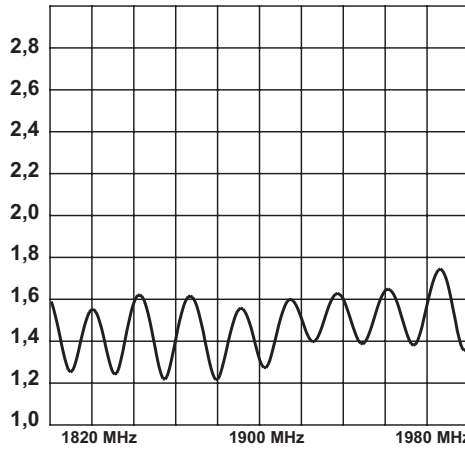
GSM 900



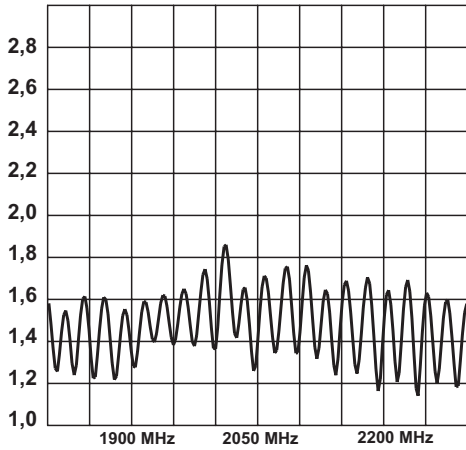
GSM 1800



GSM 1900



UMTS

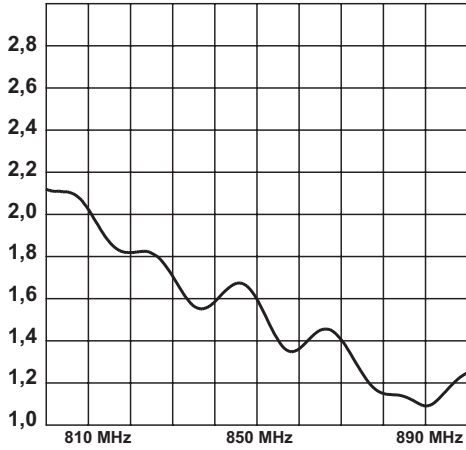


Installation between 2 metal bars

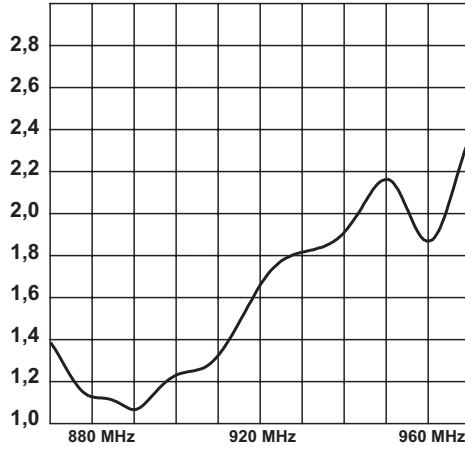
Antenna diagrams

Typ. VSWR

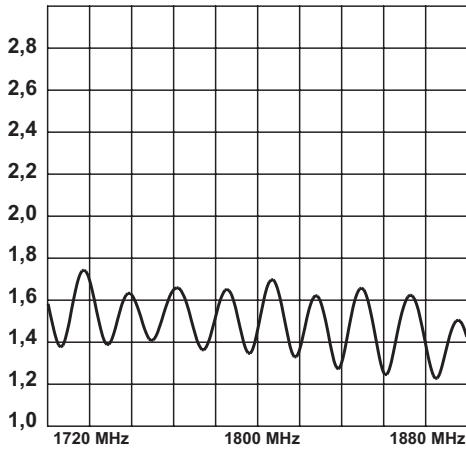
GSM 850



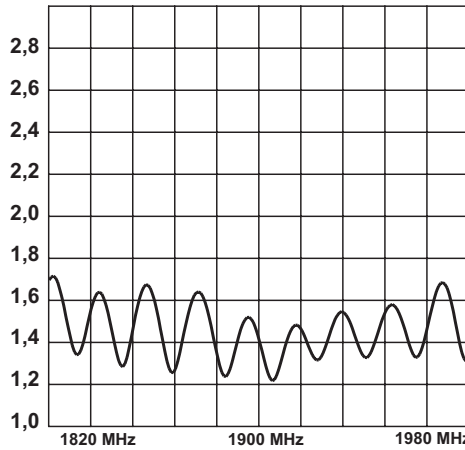
GSM 900



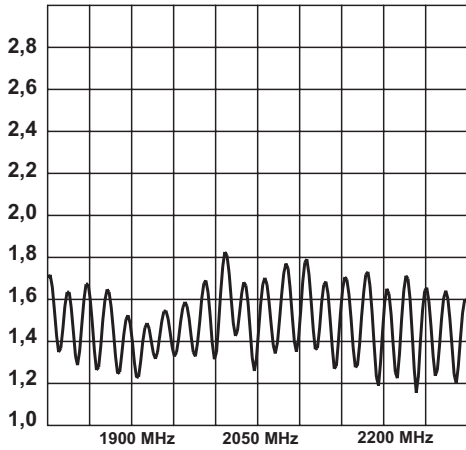
GSM 1800



GSM 1900



UMTS

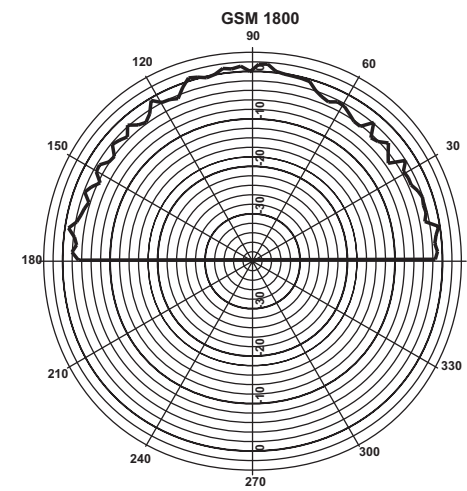
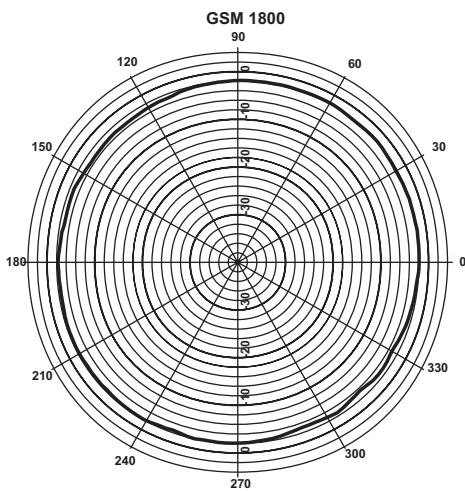
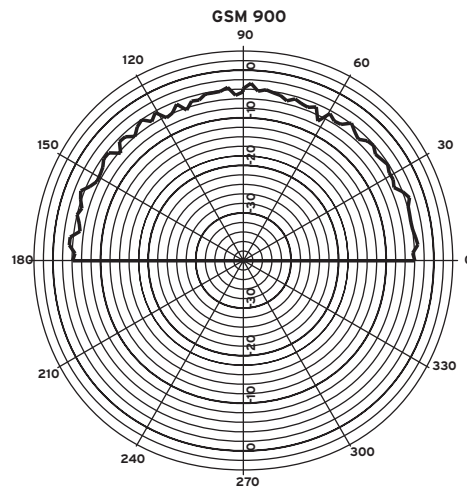
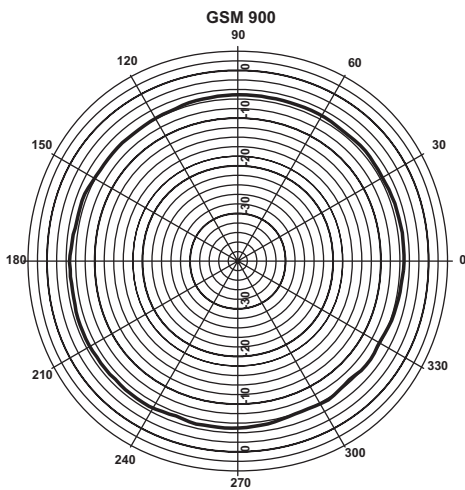
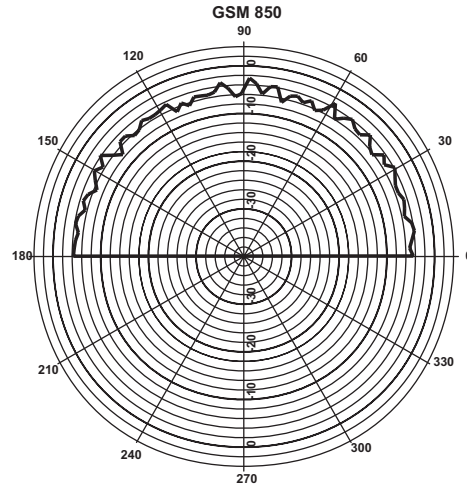
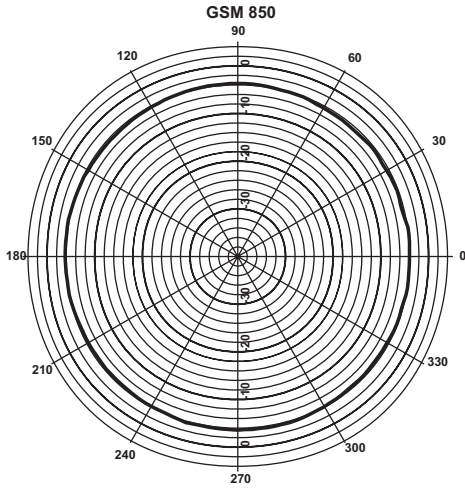


Antenna diagrams

Typ. Radiation pattern

Horizontal / Azimuth

Vertikal / Elevation

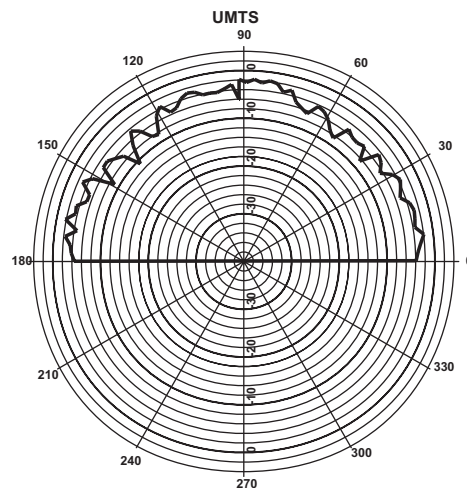
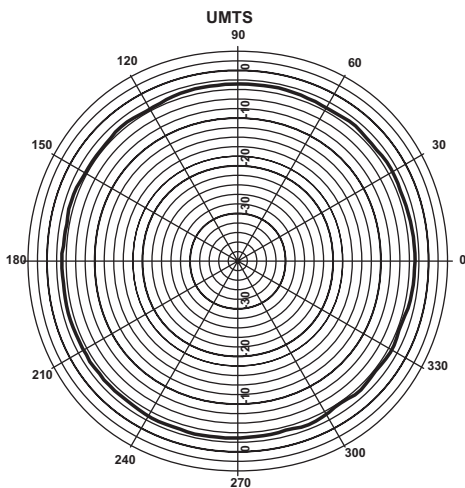
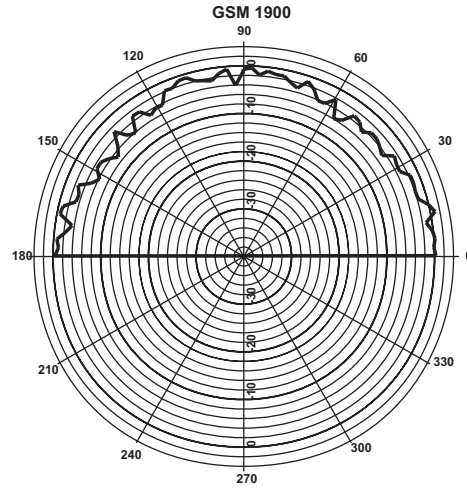
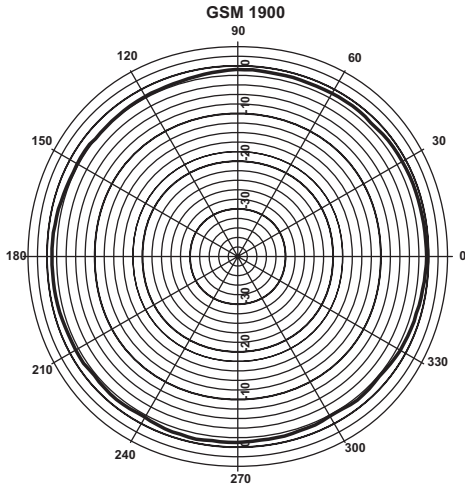


Antenna diagrams

Typ. Radiation pattern

Horizontal / Azimuth

Vertikal / Elevation



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