HIRSCHMANN MOBILITY

CELLULAR (2G/3G)/ GNSS (GPS/GLONASS) Screw Antenna

CGN 1890 LP S/series

Pt no.

602-434-…

- Combination antenna for satellite reception (GLONASS and GPS) for telematics applications (e.g. fleet management, vehicle location or e-call systems)
- Cellular multiband coverage
- Mounting on any surface (e.g. plastics, metal …)

Subject to alterations

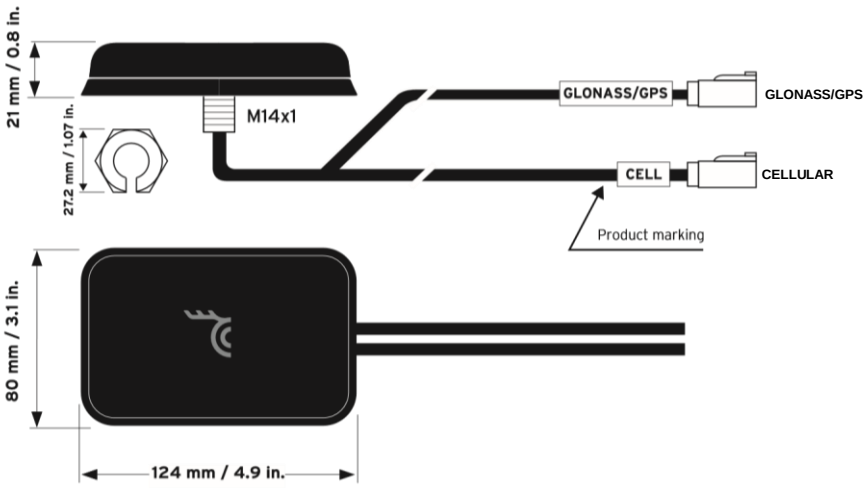
Technical data

Dimensions		124 mm x 80 mm x 21 mm / 4.9 x 3.1 x 0.8 in.
Weight		340 g / 12 oz.
Temperature range		-40 - +85°C / -40 - +185 °F
Protection class		IP6K9K (acc. ISO 20653)
GNSS		
Receive frequency GPS		1575.42 ± 1.023 MHz
Receive frequency GLONASS		1602.0 - 1614.94 MHz
Center frequency		1595.0 ± 5 MHz
Polarization		right hand circular
Gain		4,5 dBic [1)]
Voltage supply		3 - 5,5 VDC (remote-fed)
Current consumption	typ.	29 mA @ 3,3 ± 0,3 V
Amplification (LNA)		20 ± 2 dB @ 3,3 ± 0,3 V
Bandwidth (LNA)		100 MHz
Impedance (LNA)		50 Ohm
VSWR		< 1,5
Noise figure (LNA)		≤ 3,0 dB
Cellular		
Frequency range	GSM 850:	824 - 894 MHz
	GSM 900:	880 - 960 MHz
	GSM 1800:	1710 - 1880 MHz
	GSM 1900:	1850 - 1990 MHz
	UMTS:	1920 - 2170 MHz
Impedance		50 Ohm
VSWR		≤ 3,0
Gain		0 dBi [2)]
Polarization		linear, vertical
Load capacity	max.	10 W pulsed acc. GSM standard
Diagnostic		Resistor 10 kOhm

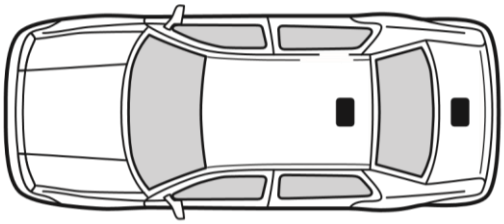
Cable and Connector (RG 174)			
Cable length [3]	-001:	GLONASS/GPS:	3000 +30 mm / 118 +1.2 in.
		Cellular:	3000 +30 mm / 118 +1.2 in.
	-002:	GLONASS/GPS:	5000 +50 mm / 197 +1.97 in.
		Cellular:	5000 +50 mm / 197 +1.97 in.
Connector [3]	-001:	GLONASS/GPS:	FAKRA female, Code C blue
		Cellular:	FAKRA female, Code D bordeaux
	-002:	GLONASS/GPS:	FAKRA female, Code C blue (AIMMET)
		Cellular:	FAKRA female, Code D bordeaux (AIMMET)

[1] dBic: referenced to an isotropic radiator, circular polarization
[2] referenced to an isotropic radiator
[3] other cable length and connectors on request

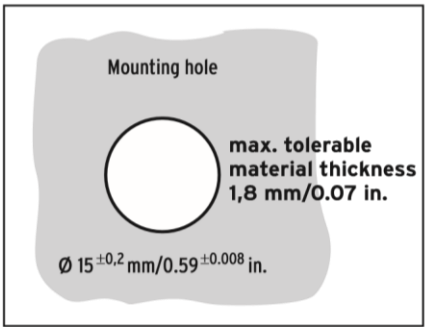
Technical drawings

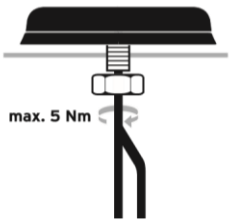


Installation



Recommended place of installation



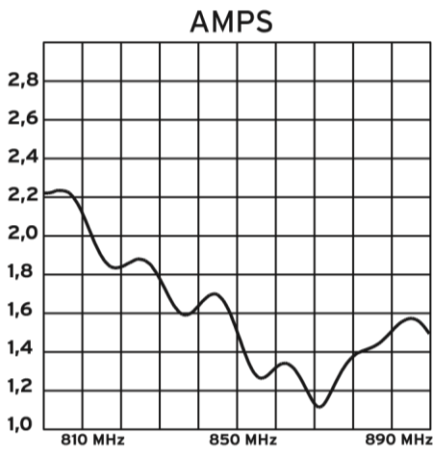


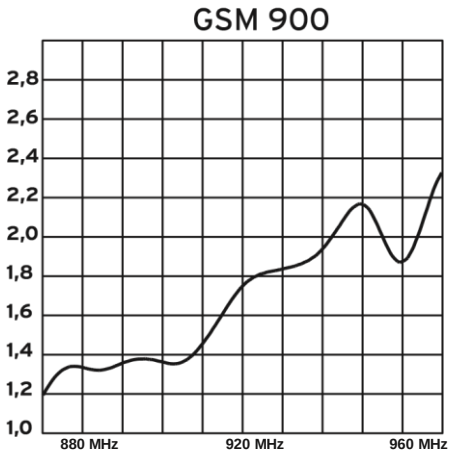
Subject to alterations

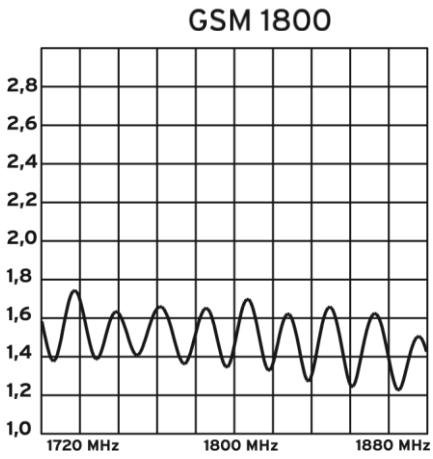
Installation on ground plane

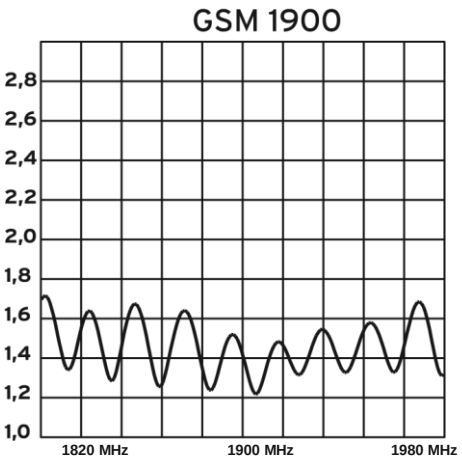
Antenna diagrams

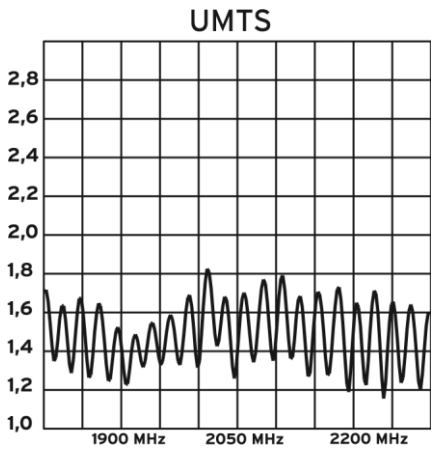
Typ. VSWR









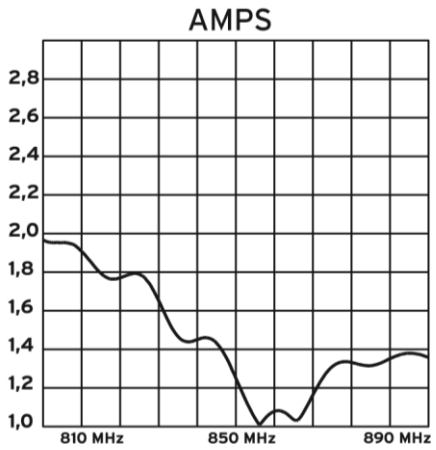


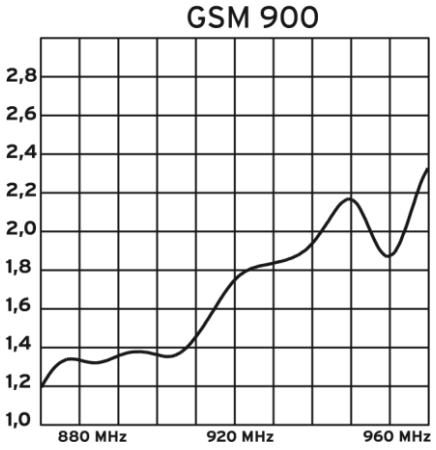
Subject to alterations

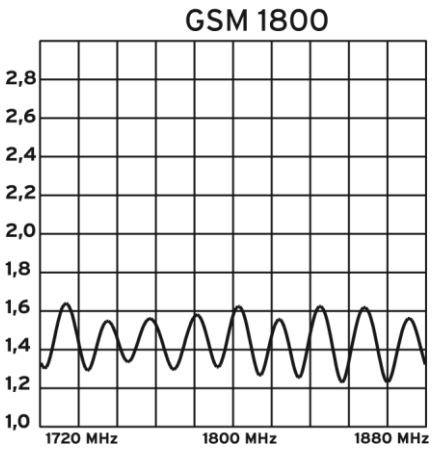
Installation on non-conductible plane

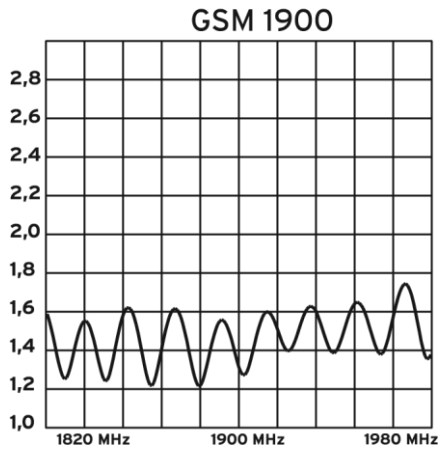
Antenna diagrams

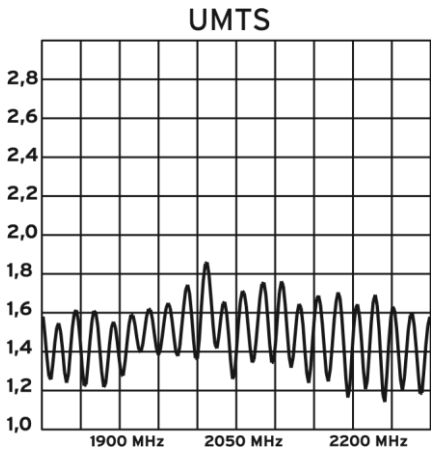
Typ. VSWR









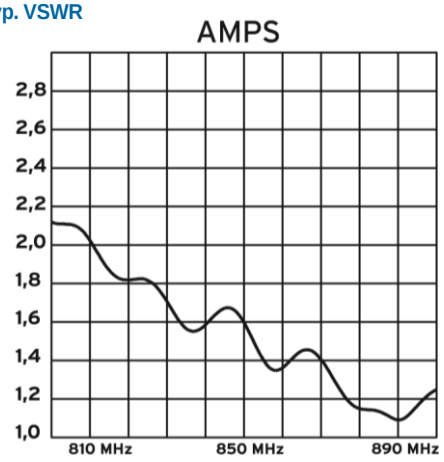


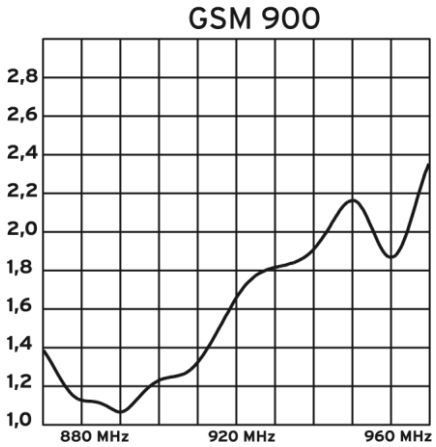
Subject to alterations

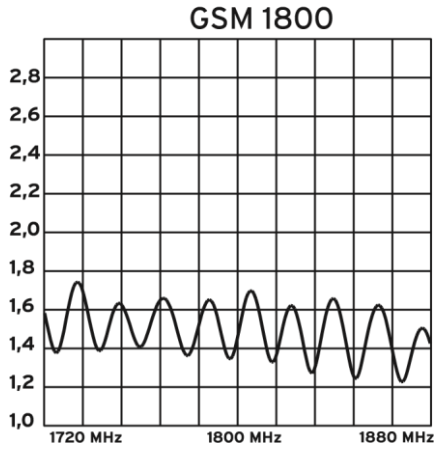
Installation between 2 metal parts

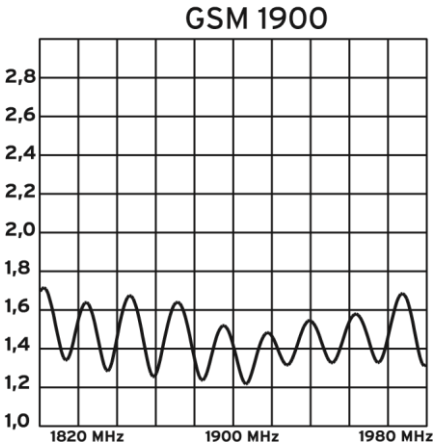
Antenna diagrams

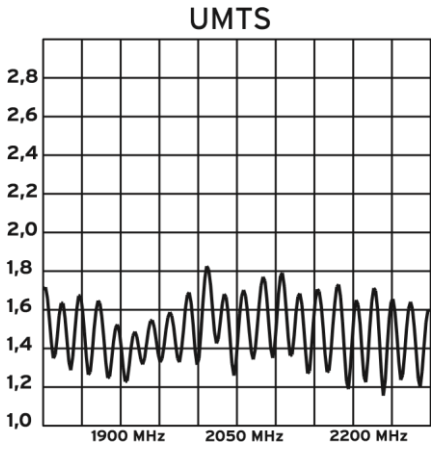
Typ. VSWR









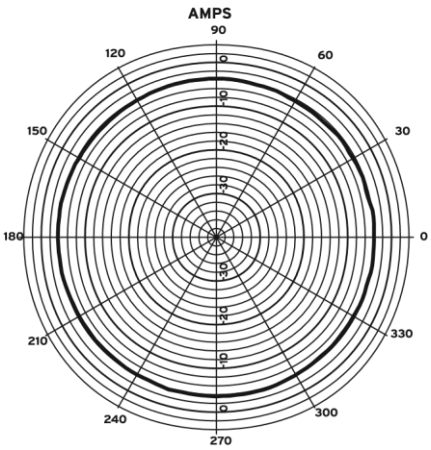


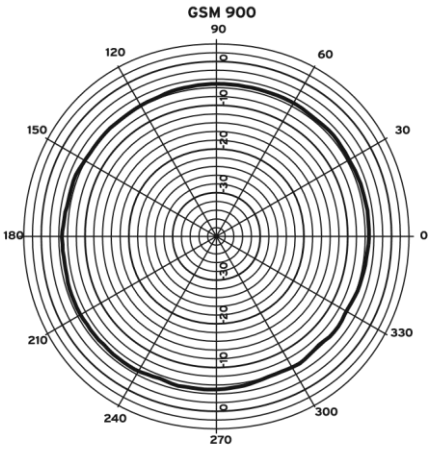
Subject to alterations

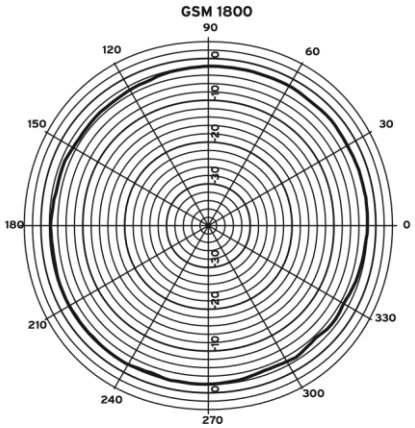
Antenna diagrams

Typ. Radiation Pattern

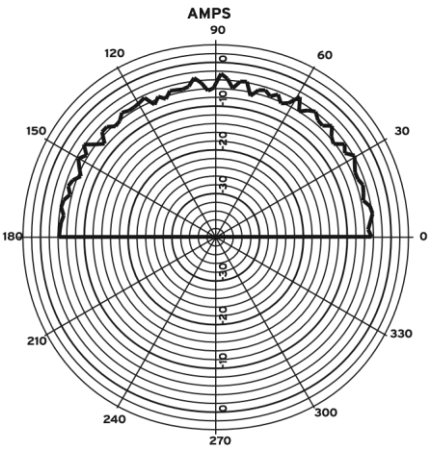
horizontal / Azimuth

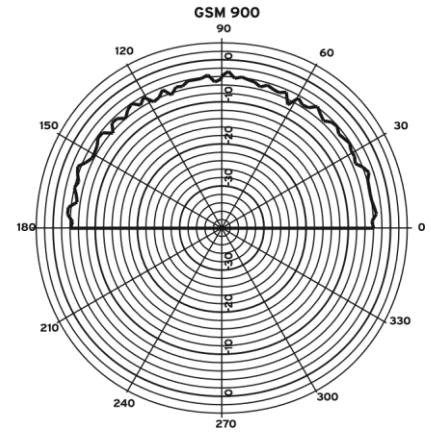


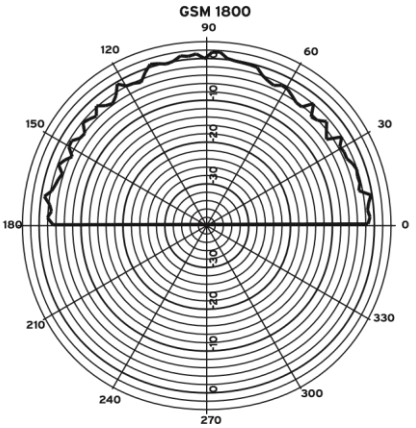




vertikal / Elevation







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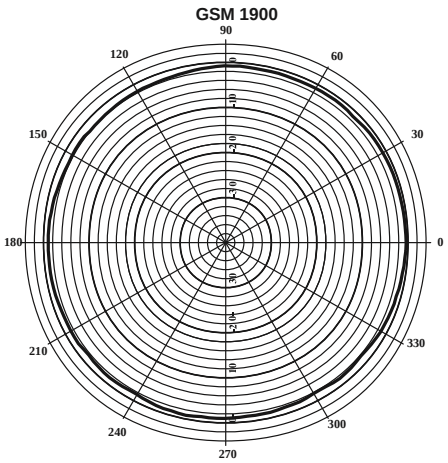

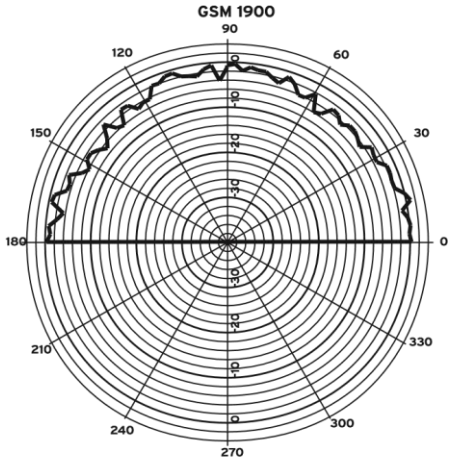

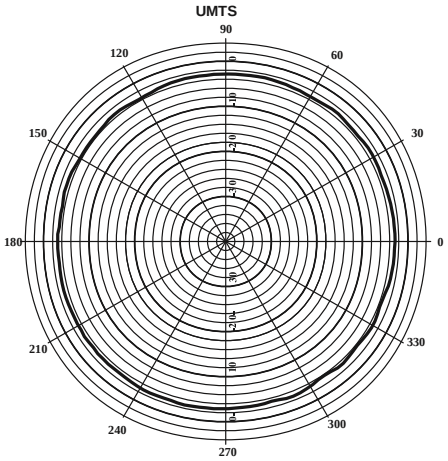

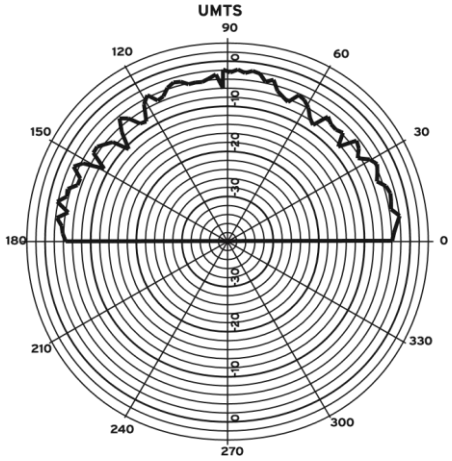

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