

# HIRSCHMANN MOBILITY



# IRIDIUM/ GNSS (GPS/GLONASS)/ Cellular (2G/3G) Screw Antenna

## IGNC 8521 SF S/series

Pt. nos.  
**956-310-5..**

- For use in telematic applications
- Low profile (69mm height )
- Mounting on several surfaces (e.g. plastic, metal, ...)
- Customization of cable lengths, types and connectors possible

Subject to alterations

## 1. Technical data

Dimensions	124mm x 80mm x 69mm
Weight	200 g
Temperature range	-40°C to +85°C
Protection class	IP66 (acc. IEC 60529)
<b>IRIDIUM</b>	
Frequency range	1616 - 1626.5 MHz
Impedance	50 Ohm
VSWR	≤ 1.8
Gain	3 dBic <sup>3</sup>
Polarization	RHCP
Axial ratio	< 4 dB
Load capacity	8 W
Lightning protection	DC grounded
<b>GNSS (GPS/GLONASS)</b>	
Frequency range	1.575 - 1.61 GHz
Impedance	50 Ohm
Gain	2 dBic min. <sup>3</sup>
Amplification	26 ± 2 dB typ.
Noise figure (50 Ohm)	≤ 1.4 dB typ. 1m
Voltage supply	3 V - 5.5 V
Current consumption	≤ 13mA at 5 V ± 0.5 V (typ. 10mA)
<b>Cellular</b>	
Frequency range	824-2170 MHz (AMPS / GSM800 through UMTS)
Gain	Typ. ≥ 3 dBi
Load capacity	Max. 10W pulsed

<sup>1</sup> Other cable lengths available upon request

<sup>2</sup> Other configurations available upon request

<sup>3</sup> dBic: referenced to an isotropic radiator, circular polarization

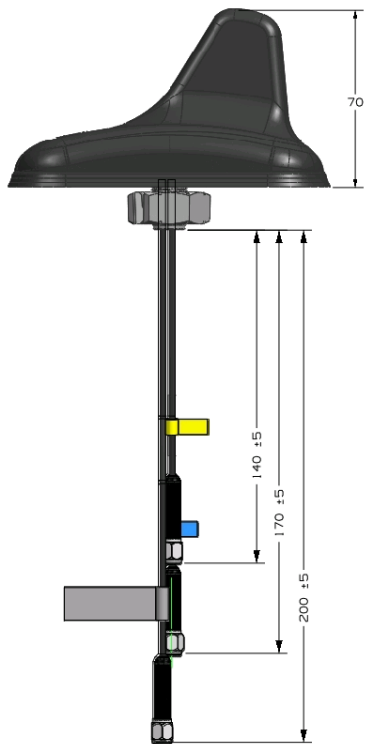
Subject to alterations

**2. Product Family**

Order code	Cable (length)			Connector (type)			Remark
	IRIDIUM	GNSS	Cellular	IRIDIUM	GNSS	Cellular	
<b>Versions</b>	<b>L1</b>	<b>L2</b>	<b>L3</b>	<b>C1</b>	<b>C2</b>	<b>C3</b>	
956-310-501	200 mm	170 mm	140 mm	SMA m	SMA m	SMA m	Cable RG174, ROHS
956-310-502	2000 mm	2000 mm	2000 mm	SMA m	SMA m	SMA m	Cable RG174, ROHS
956-310-503	600 mm	570 mm	540 mm	SMA m	SMA m	SMA m	Cable RG174, ROHS

Customization of cable lengths, types and connectors possible.

**3. Technical Drawing**



Subject to alterations

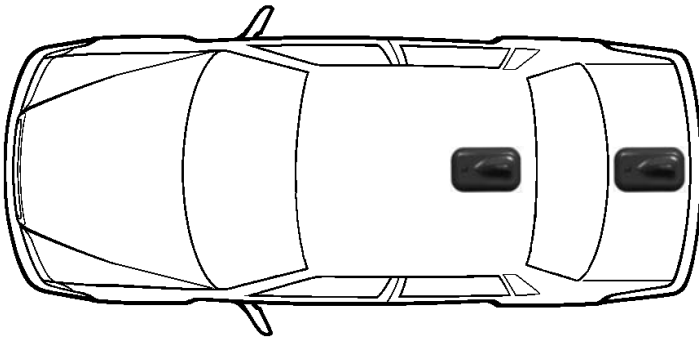
## 4. Mounting example and procedure

### Vehicle roof mounting

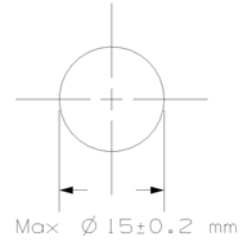
#### Mounting requirements and restrictions

- Choose appropriate mounting location on flat surface (see Sketch #1) .
- Max. tolerable mounting material thickness 10 mm/ 0.4 in.
- Safely drill 15 mm/ 0.6 in. mounting hole at desired location (see Sketch #2)
- Clean mounting area with isopropyl alcohol or similar.
- Unscrew mounting nut (see Sketch #3)
- Feed all cables through mounting hole (see Sketch #4)
- Slide slotted mounting nut over cables and screw back on to antenna mounting stud.
- Maximum tightening torque is 5Nm.

#### Sketch #1—Select Mounting Location



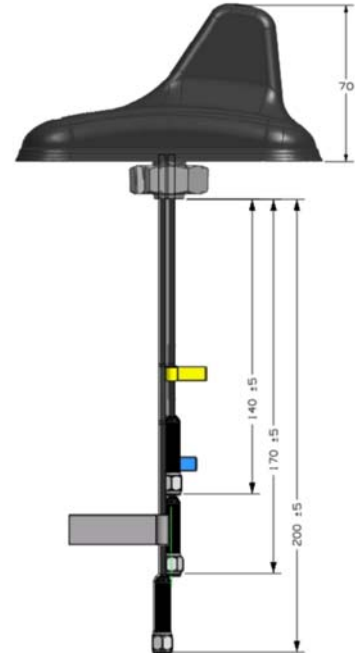
#### Sketch #2—Required Mounting hole



#### Sketch #3—Mounting Nut



#### Sketch #4—Mount in hole



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[hirschmann-mobility@te.com](mailto:hirschmann-mobility@te.com)

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