



HIRSCHMANN MOBILITY

**Cellular (2G/3G/4G)/
GNSS (GPS/GLONASS)/
WLAN (2.4GHz/5.8GHz) Screw Antenna**

CGNW 702659 SF S/Series

Part Number 955-181-XXX

Features

- Combination antenna for positioning, data-services and short range radio services
- Terrestrial based transmission and satellite-based positioning
- Embedded high performance LNA with ceramic patch antenna
- Screw mounting on metallic ground
- Street vehicle roof mount installation

Technical Data

Dimensions	95 mm x 57 mm x 72 mm
Housing materials	PA 6
Weight	ca. 178 g
Tightening torque	max. 7 Nm
Temperature range	-40 °C - +85 °C
Protection class	IP 6k9K (acc. ISO 20653)
Cable type	RG 174

Technical Data

Cellular	
Frequency range	LTE-LB: 698 - 862 MHz GSM 850: 824 - 894 MHz GSM 900: 880 - 960 MHz GSM 1800: 1710 - 1880 MHz GSM 1900: 1850 - 1990 MHz UMTS: 1920 - 2170 MHz LTE-HB: 2305 - 2690 MHz
Impedance	50 Ohm
Return loss	> 12 dB
Decoupling	> 40 dB
Load capacity	max. 8 W pulsed acc. GSM standard
VSWR	< 3:1
Gain	2.5 dBi ¹⁾

GNSS	
Frequency range	GPS: 1.57542 GHz ± 1.023 MHz (L1-band) GLONASS: 1602.0 - 1614.94 MHz
Impedance	50 Ohm
Return loss	> 12 dB
Gain	typ. 2 dBic ²⁾
Amplification	typ. 27 ±3 dB
Noise figure	< 1.9 ±0.3 dB
Voltage supply	2.9 - 5.5 VDC
Current consumption	≤ 12 mA ± 3 mA at 3.3 V

WLAN	
Frequency range	IEEE 802.11 b, g: 2400 - 2484 MHz IEEE 802.11 a, h: 5150 - 5725 MHz IEEE 802.11 n: 2400 - 2484 MHz 5150 - 5725 MHz IEEE 802.11 p: 5755 - 5925 MHz
Impedance	50 Ohm
Load capacity	IEEE 802.11 b, g: max. 200 mW (1 W only USA) IEEE 802.11 p: 8 W EIRP (5.79 - 5.81 GHz) 2 W EIRP (5.85 - 5.92 GHz)

CGNW 702659 SF S/Series | Part Number 955-181-XXX

WLAN	
VSWR	< 2.5:1
Gain	2.5 dBi ¹⁾ @ 2.4 GHz; +3 dBi ¹⁾ @ 5.8 GHz
Diagnostic resistor	10 kOhms

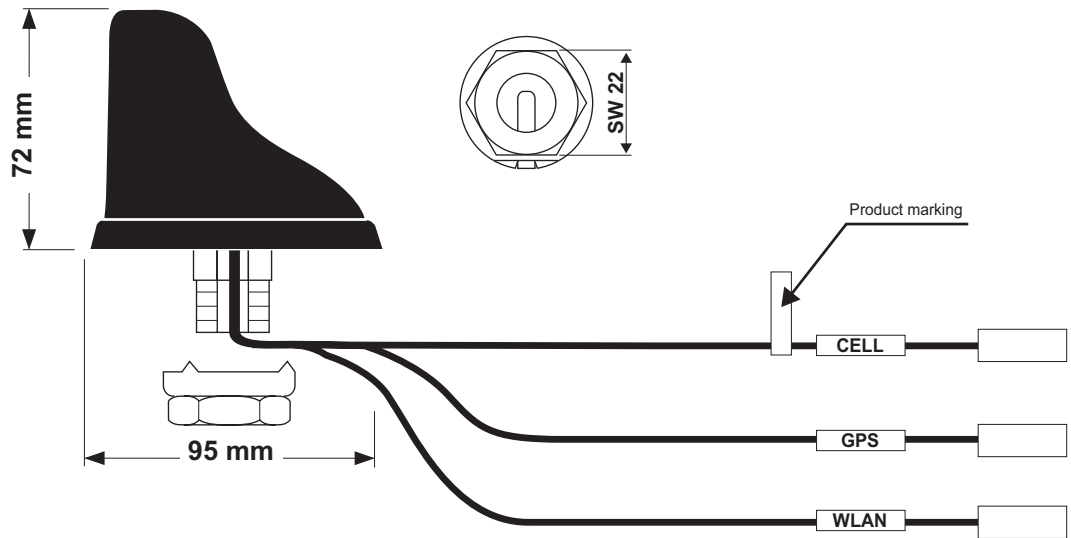
¹⁾ dBi: referenced to an isotropic radiator

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

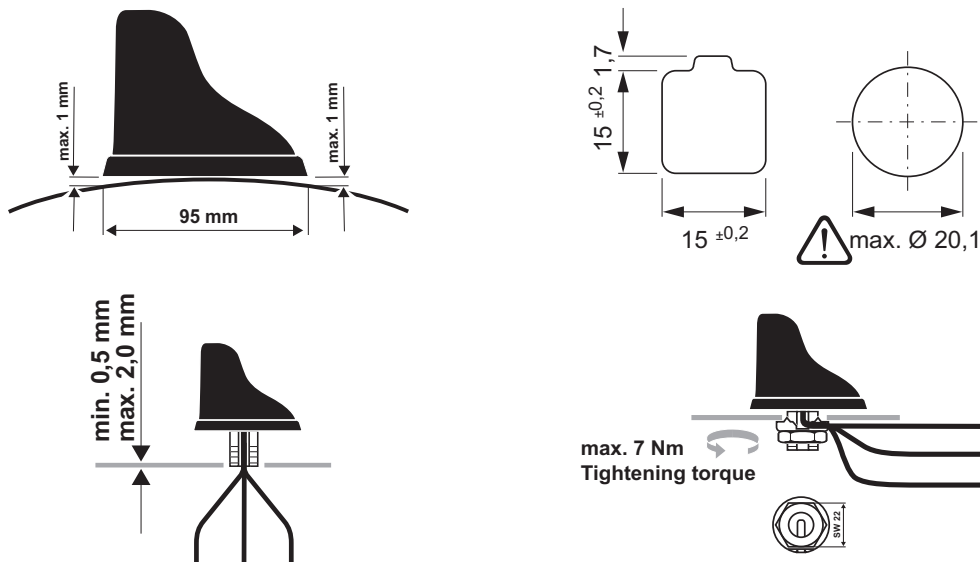
Versions

PN	Description	CELL	GNSS	WLAN
955-181-001	CGNW 702659 SF S/SMA/0.15	150 mm SMAM	150 mm SMAM	150 mm SMAM
955-181-002	CGNW 702659 SF S/FAKRA/D/C/E/0.3	325 mm FAKRAF, D	305 mm FAKRAF, C	315 mm FAKRAF, E
955-181-003	CGNW 702659 SF S/FME/3.0	3000 mm FMEf	3000 mm FMEf	3000 mm FMEf
925-181-004	CGNW 702659 SF S/SMA/5.0	5000 mm SMAM	5000 mm SMAM	5000 mm SMAM
955-181-005	CGNW 702659 SF S/FAKRA/D/C/E/5.0	5000 mm FAKRAF, D	5000 mm FAKRAF, C	5000 mm FAKRAF, E
955-181-006	CGNW 702659 SF S/FME/SMA/FME/5.0	5000 mm FMEf	5000 mm SMAM	5000 mm FMEf
955-181-007	CGNW 702659 SF S/FME/SMB/SMA/0.25	250 mm FMEf	250 mm SMBf	250 mm SMAM
955-181-008	CGNW 702659 SF S/FAKRA/D/C/K/2.0	2000 mm FAKRAF, D	2000 mm FAKRAF, C	2000 mm FAKRAF, K
955-181-009	CGNW 702659 SF S/SMA/3.0	3000 mm SMAM	3000 mm SMAM	3000 mm SMAM
955-181-010	CGNW 702659 SF S/FAKRA/D/C/K/5.0	5000 mm FAKRAF, D	5000 mm FAKRAF, C	5000 mm FAKRAF, K
955-181-011	CGNW 702659 SF S/FAKRA/D/C/B/0.3	325 mm FAKRAF, D	325 mm FAKRAF, C	325 mm FAKRAF, B
955-181-012	CGNW 702659 SF S/FAKRA/D/C/I/0.3	300 mm FAKRAF, D	300 mm FAKRAF, C	300 mm FAKRAF, I

Technical Drawing



Installation



te.com/hirschmann-mobility
hirschmann-mobility@te.com

Hirschmann Car Communication GmbH,
 a TE Connectivity Company
 Stuttgarter Strasse 45-51
 72654 Neckartenzlingen | Germany
 Phone: +49 7127 14-0 | Fax: +49 7127 14-1428

TE, TE Connectivity, and TE connectivity (logo) are trademarks.
 Hirschmann, LTE, GSM, UMTS, GLONASS and FAKRA are trademarks.
 Other products and/or company names might be trademarks of their respective owners.

DISCLAIMER While TE Connectivity (TE) has made every reasonable effort to ensure the accuracy of the information in this data sheet, TE does not guarantee that it is error-free, nor does TE make any other representation, warranty or guarantee that the information is accurate, correct, reliable or current. TE reserves the right to make any adjustments to the information contained herein at any time without notice. TE expressly disclaims all implied warranties regarding the information contained herein, including, but not limited to, any implied warranties of merchantability or fitness for a particular purpose. The dimensions in this data sheet are for reference purposes only and are subject to change without notice. Specifications are subject to change without notice. Consult TE for the latest dimensions and design specifications.

© 2020 TE Connectivity. All Rights Reserved. | Published 04-2020

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[TE Connectivity:](#)

[955181004](#)