

# Smarteq™ AllDisc Combi GNSS+ Antenna Platform

LTE(2G/3G/4G/5G) and GNSS+ Combination Antenna

710828, 710829, 710830



## Description

A low-profile, whipless combination antenna with durable design that delivers optimal performance and support of multi-carrier voice and data networks

## Technologies

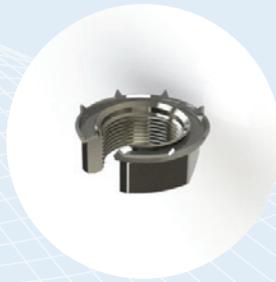
- 2G / 3G / 4G / 5G
- GNSS
- GPS L1
- Galileo E1
- Glonass L1
- Beidou

## Features

- 2-in-1 combination antenna
- 5G ready
- LNA gain 30dB with pre-filter
- Easy to install
- IP6K9K class
- Cable approved acc ECE-R118



710452 – AllDisc  
bracket



710598 – Slitted nut



710206 – Extension nut  
to be used on AllDisc with long  
screw enabling installation  
thickness 25-50mm

## Smarteq™ AllDisc Combi GNSS+ Antenna Platform

### LTE(2G/3G/4G/5G) and GNSS+ Combination Antenna

The Smarteq™ AllDisc Combi GNSS+ antenna platform supporting LTE bands 2G/3G/4G/5G and GNSS (GPS/Glonass/Galileo/Beidou) in a low profile casing with durable design IP6K9K. It is ground plane independent which enables flexible and easy installation, making it perfect for fleet management, track and trace, navigation, and cargo handling. Dual-feed GNSS antenna enables excellent Axial ratio and gain. Pre-filtered LNA ensures functionality in a combination antenna. The superior RF performance enables high connectivity and throughput. The AllDisc Combi antenna platform has been successfully tested for durability according to Volkswagen automotive test standards.

#### Features

- 5G ready
- LTE Main: 617-960 / 1710-2690 MHz and 3300-3800 MHz
- GNSS: 1559-1610 MHz
- LNA gain 30dB
- IP6K9K class
- Approved according to ECE-R118
- Designed in Sweden with design registration

#### Applications

- Off-Highway Vehicle (OHV)
- Public safety
- Track and trace
- Fleet management
- Navigation / Positioning
- Cargo/load handling

#### Certifications



## SPECIFICATIONS



# Smarteq™ AIIDisc Combi GNSS+ Antenna Platform

## LTE(2G/3G/4G/5G) and GNSS+ Combination Antenna

### Standard Configurations

Model	Elements	Cable Length	Connector	Housing Color	Accessories
710828	LTE GNSS+	0.20m 0.25m	FAKRA-m/D FAKRA-m/C	Black	710452 – Bracket 710598 – Slitted nut 710206 – Extension nut
710829	LTE GNSS+	2.5m 2.5m	SMA-m SMA-m	Black	
710830	LTE GNSS+	5.0m 5.0m	SMA-m SMA-m	Black	

### Electrical Specifications – RF Antennas (All Models)

Frequency Ranges	VSWR <sup>1</sup>	Peak Gain <sup>2</sup>	Efficiency <sup>2</sup>	Correlation Factor	Nominal Impedance	Polarization	Radiation Characteristics	Max. Power <sup>3</sup>	DC Short
LTE / 5G									
617 - 698 MHz	< 3:1	1 dBi	~40%	<0.02	50Ω	Linear	Omnidirectional	10 watts	Yes
698 - 960 MHz	< 2.7:1	5.5 dBi	~65%						
1710 - 2690 MHz	< 2.1:1	4.5 dBi	~77%						
3300 - 3800 MHz	< 1.9:1	6.5 dBi	~66%						

### Electrical Specifications – GNSS Antenna

Specification	Measurement	
Frequencies	1559-1610 MHz	
Impedance	50 Ω	
Polarization	RHCP	
VSWR	< 2.0:1	
Gain Passive / Peak Gain	GPS	4.5 dBic
	GLONASS	4.0 dBic
	GALILEO	3.0 dBic
	BEIDOU	3.0 dBic
Gain Active	30 + 1 dB	
Noise Figures	< 2.5 dB with pre-filter (1.2dB no pre-filter)	
Out-of-band Rejection	< 960 MHz	> 60 dB
	> 1710 MHz	> 60 dB
Compression Point	-20 dBm	
Supply Voltage	2.4-6 V	
Current Consumption	8-10 mA	

<sup>1</sup> Antenna parameters measured with 0.5m cable in free space.

<sup>2</sup> Peak Gain measured with 0.5m cable on Ø30cm ground plane.

<sup>3</sup> Maximum power measured at ambient temperature of 25°C.

**SPECIFICATIONS**

# Smarteq™ AIIDisc Combi GNSS+ Antenna Platform

## LTE(2G/3G/4G/5G) and GNSS+ Combination Antenna

### Mechanical and Environmental Specifications (All Models)

#### Physical

Dimensions (D x H)	138 x 55 mm
Weight	~200g
Radome Construction	PC/PBT/Aluminum alloy
Cable	RG316, grey
Mounting Instruction	Hole mount with center screw and adhesive tape
Operating / Storage Temperature	-40°C to +85°C
IP Class	IP6K9K

### Extension Cables

Part Number	Cable Length	Connector	Gender	Code
<b>LL58 Cable</b>				
710606	2.5m	FAKRA/SMA	Female/Male	Z
710608	2.5m	FAKRA	Female/Female	D
710609	2.5m	FAKRA	Female/Female	C
710610	2.5m	FAKRA	Female/Female	I
710607	5.0m	FAKRA/SMA	Female/Male	Z
710611	5.0m	FAKRA	Female/Female	D
710612	5.0m	FAKRA	Female/Female	C
710613	5.0m	FAKRA	Female/Female	I

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**For more information about  
this product contact your  
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