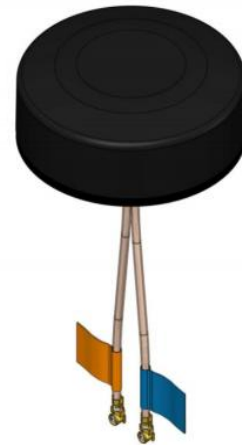


Antenna, Puck Dual

ERF4113

Description

The ERF4113 antenna is an external GSM/UMTS and GPS antenna with a 2 SMA connectors. The antenna can be used for applications such as, GSM, M2M, 2G/3G/4G and more.



Technology

- GSM
- GPRS
- M2M
- 2G/3G/4G/5G
- GPS/ GNSS
- LTE / CAT-M
- LoRa
- NB-IoT
- Zigbee

Features

Mechanical Properties	Description
Antenna	External antenna
Connector	SMA (2x)
Antenna Dimensions	46,6 mm
Antenna Color	Black
Radome Material	ABS
Cable Length	1000 mm
Cable type	RG178
Mounting	Screw
Operating Temperature	-40°C~+85°C
Storage Temperature	-40°C~+85°C
IP rating	IP65-IP67 (excluding cable outlet)

Antenna, Puck Dual

ERF4113



Electrical Properties	Antenna 1 Cellular			Antenna 2 GNSS		
Frequency marker	Frequency band MHz	Return loss dB	V.S.W.R.	Frequency band MHz	Return loss dB	V.S.W.R.
1	800	-8.1	< 2.3	1.200	-3.2	< 5.5
2	868	-13.7	< 1.5	1.575	-6.9	< 2.6
3	900	-10.4	< 1.9	-	-	-
4	915	-9.0	< 2.1	-	-	-
5	1.800	-6.7	< 2.7	-	-	-
6	1.900	-7.0	< 2.6	-	-	-
7	2.100	-16.3	< 1.4	-	-	-
8	2.400	-6.7	< 2.7	-	-	-
9	2.600	-7.0	< 2.6	-	-	-
10	5.000	-12.3	< 1.6	-	-	-
11	5.800	-16.2	< 1.4	-	-	-

Antenna, Puck Dual

ERF4113



GPS antenna Dielectric Antenna

Centre frequency	1575.42
Band Width	CF $\pm$ 4Mhz
Polarization	RHCP
Gain	0 dBic (Zenith)
V.S.W.R.	<1.5dB
Impedance	50 Ω

GPS LNA

Gain	20 $\pm$ 2dB
Noise figure	<1.5dB
V.S.W.R.	<2.0
Supply voltage	3V DC
Current Consumption	<10mA

GPS antenna

Centre frequency	824-960Mhz / 1710-2170 Mhz
Polarization	Linear
Gain	2 dBi (Zenith)
V.S.W.R.	<2.5dB
Impedance	50 Ω

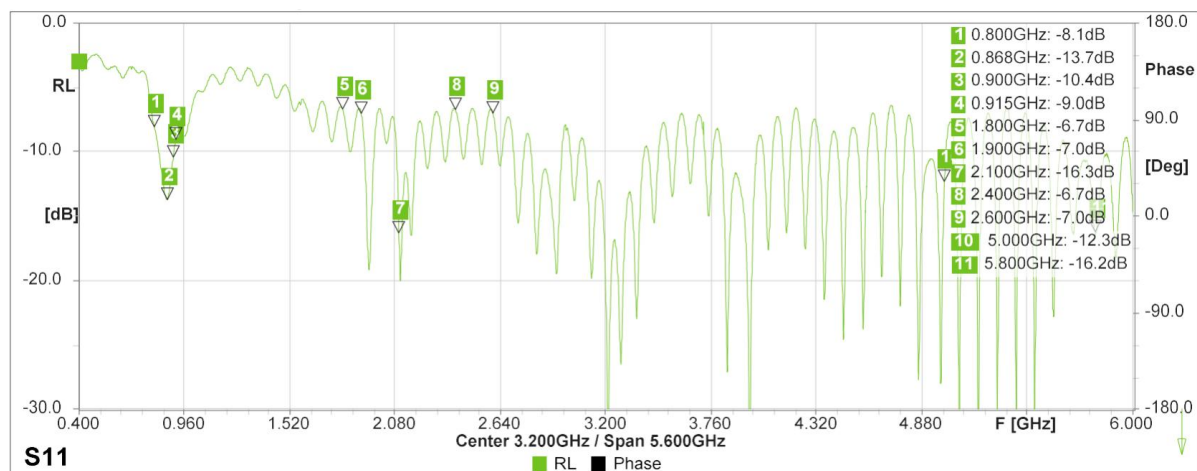
Antenna, Puck Dual

ERF4113

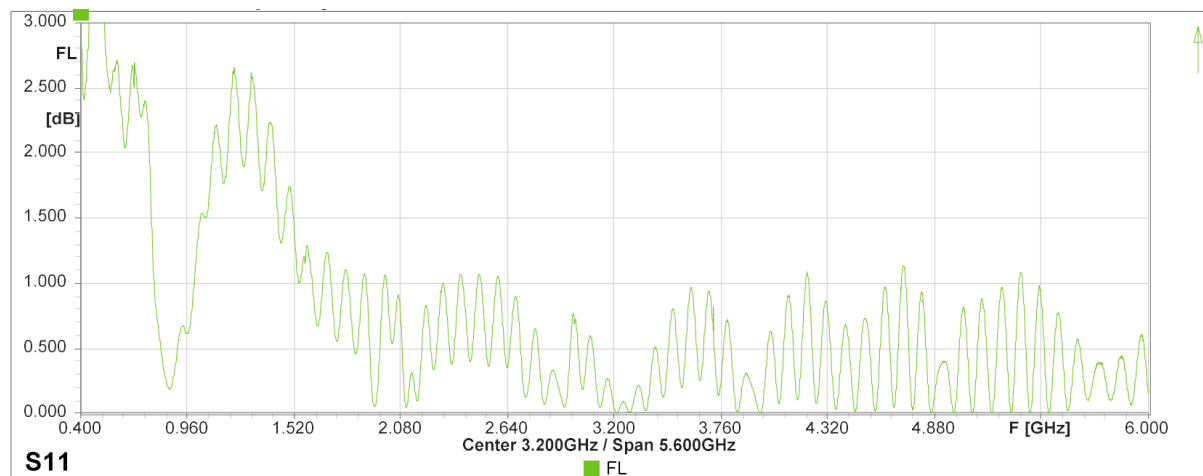
Antenna Properties

Antenna 1 Cellular

Return Loss



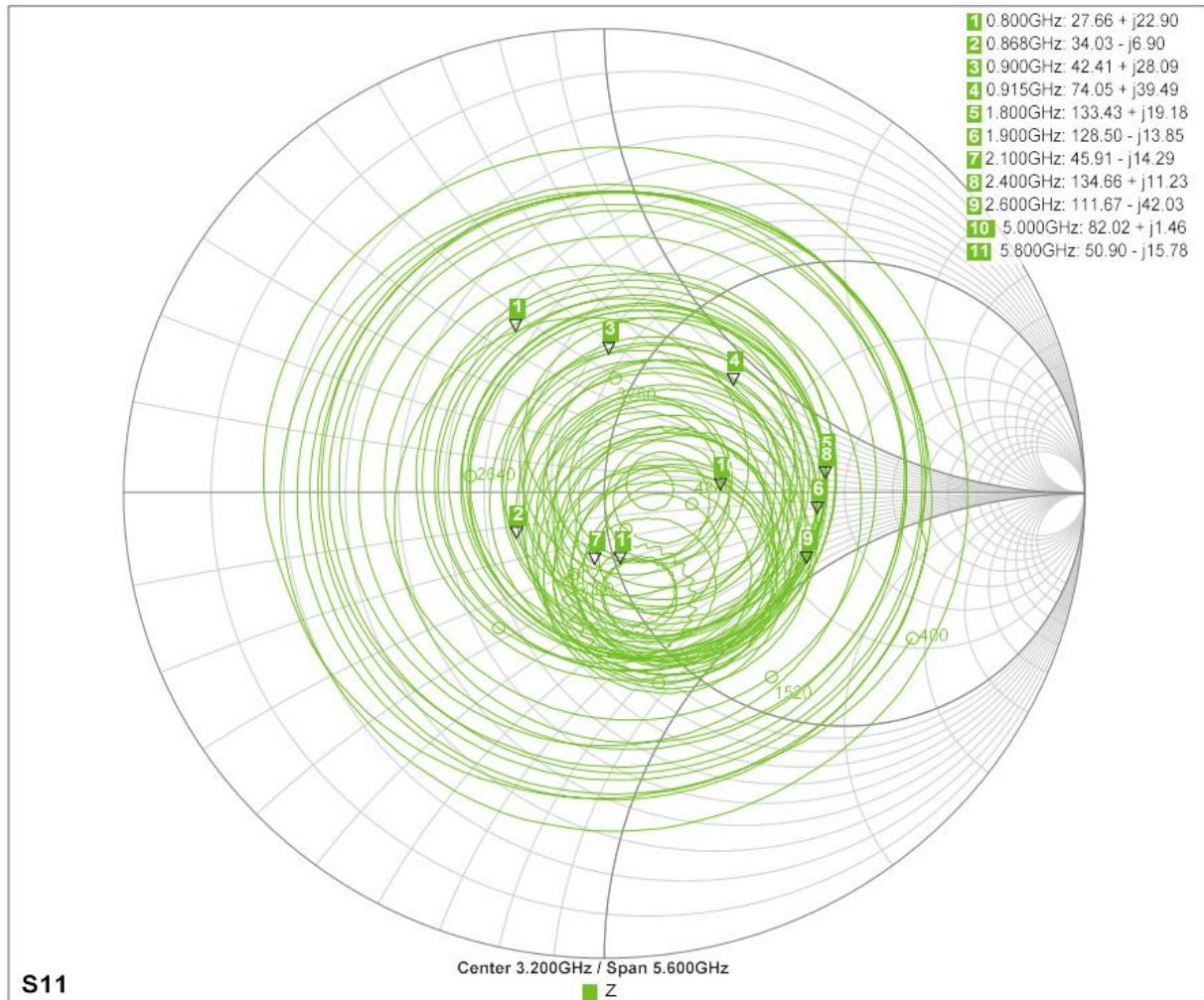
Forward Loss



Antenna, Puck Dual

ERF4113

Impedance



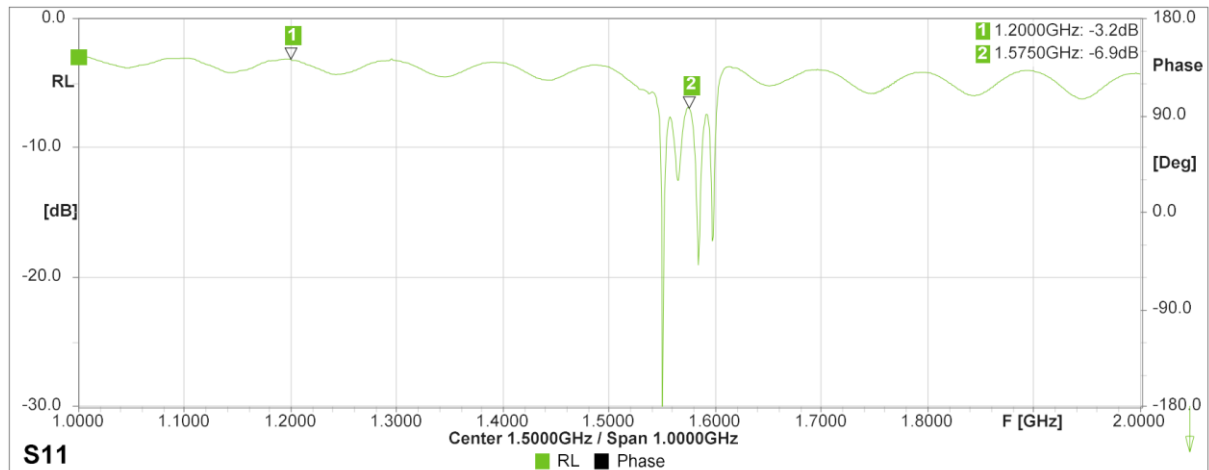
Antenna, Puck Dual

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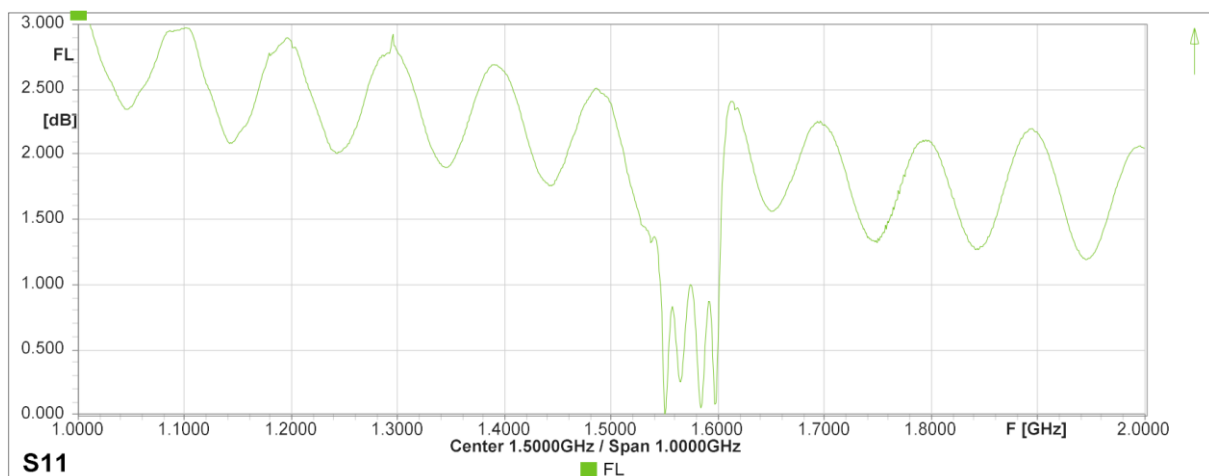


Antenna 2 GPS

Return Loss



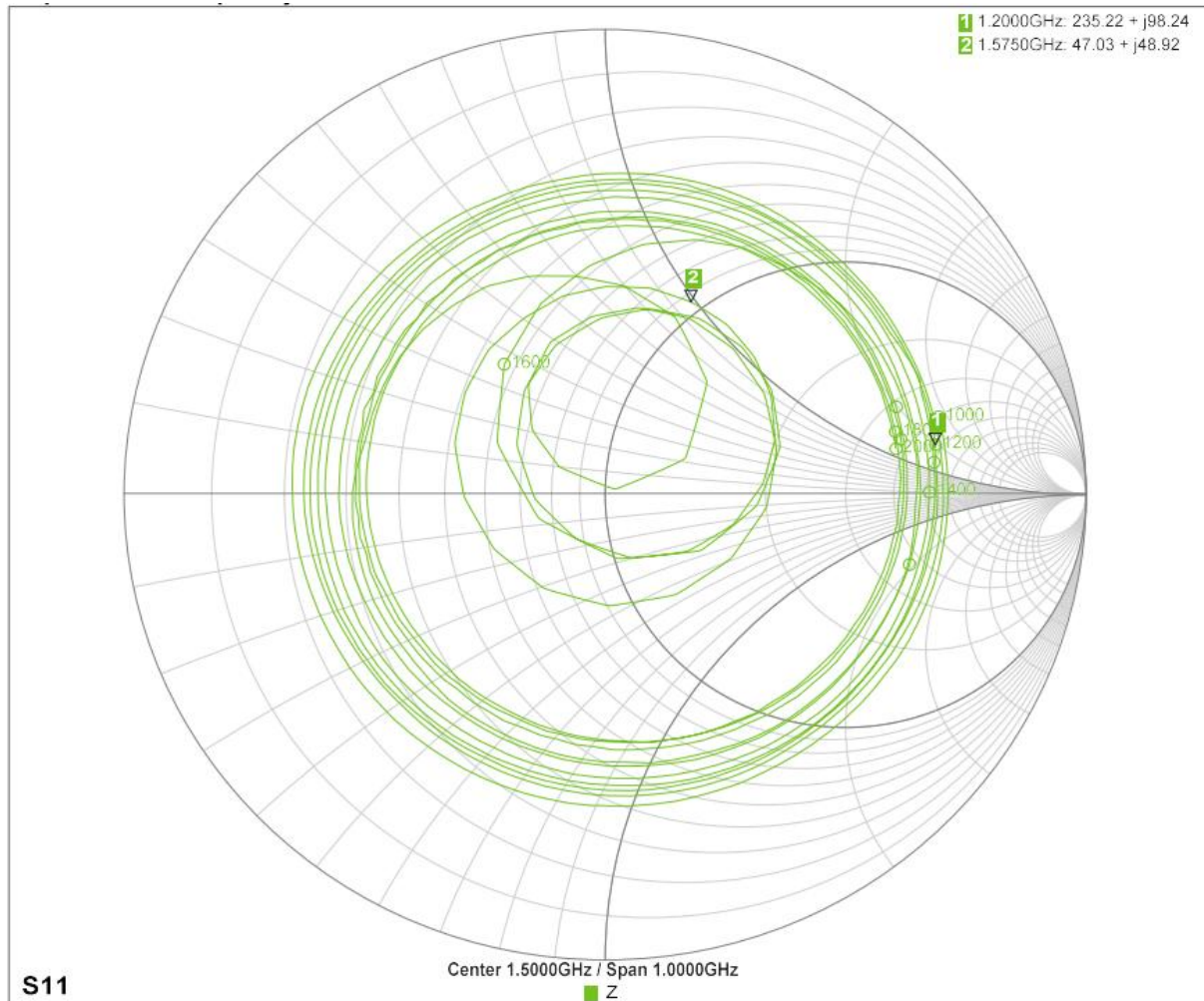
Forward Loss



Antenna, Puck Dual

ERF4113

Impedance

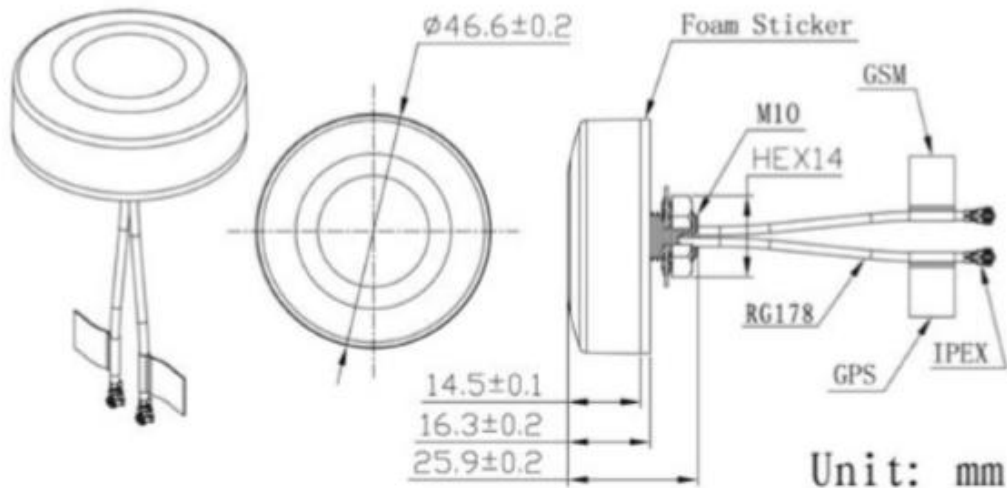


Antenna, Puck Dual

ERF4113

Dimensions

*image for reference only, the antenna uses 2x SMA Male connectors



Connectors



The ERF4113 antenna uses 2x SMA Male connector.

Ordering information

Ordering can be done via www.summit-electronics.com or via info@summit-electronics.com. Please contact us for more information. Customisation of the product is available on request.

Technical support

For all product questions please contact us via info@summit-electronics.com

Antenna, Puck Dual

ERF4113



Document revision

Rev	Date	Changes
V01.00	06-04-2023	First issue of document
V01.10	11-07-205	Additional technical information