

2J9637JBWGF-B12JW a-B10BW

(Datasheet)

Type	Marine Antenna
Frequencies	GPS (1575.42 MHz) GLONASS (1592 - 1610 MHz) AIS (162 MHz)
Mounting	Screw Mount
Revision	00



Tipul
P. Tipul



1. SPECIFICATION

1.1. Electrical Specifications

Navigation (Cable 1)

Frequencies	GPS/GLONASS (1572 – 1610 MHz)
Impedance	50 Ohms
Polarization	RHCP
LNA Gain	23dB at 3V and 24dB at 5V
VSWR	<1.2:1
Voltage supply	2,7V - 5,5V
Current	15 mA to 25 mA
Power (max.)	138mW
Operating temperature	-40°C to +85°C
Note	Antenna is filtered

AIS (Cable 2)

Frequencies	AIS (162 MHz)
Impedance	50 Ohms
Polarization	Linear
VSWR	<2:1
Power handling	25W
Operating temperature	-40°C to +85°C

1.2. Connection Specifications

Cable 1(Navigation)

Connector type: FME female
Cable type: RG58W (White)
Cable length: 10m

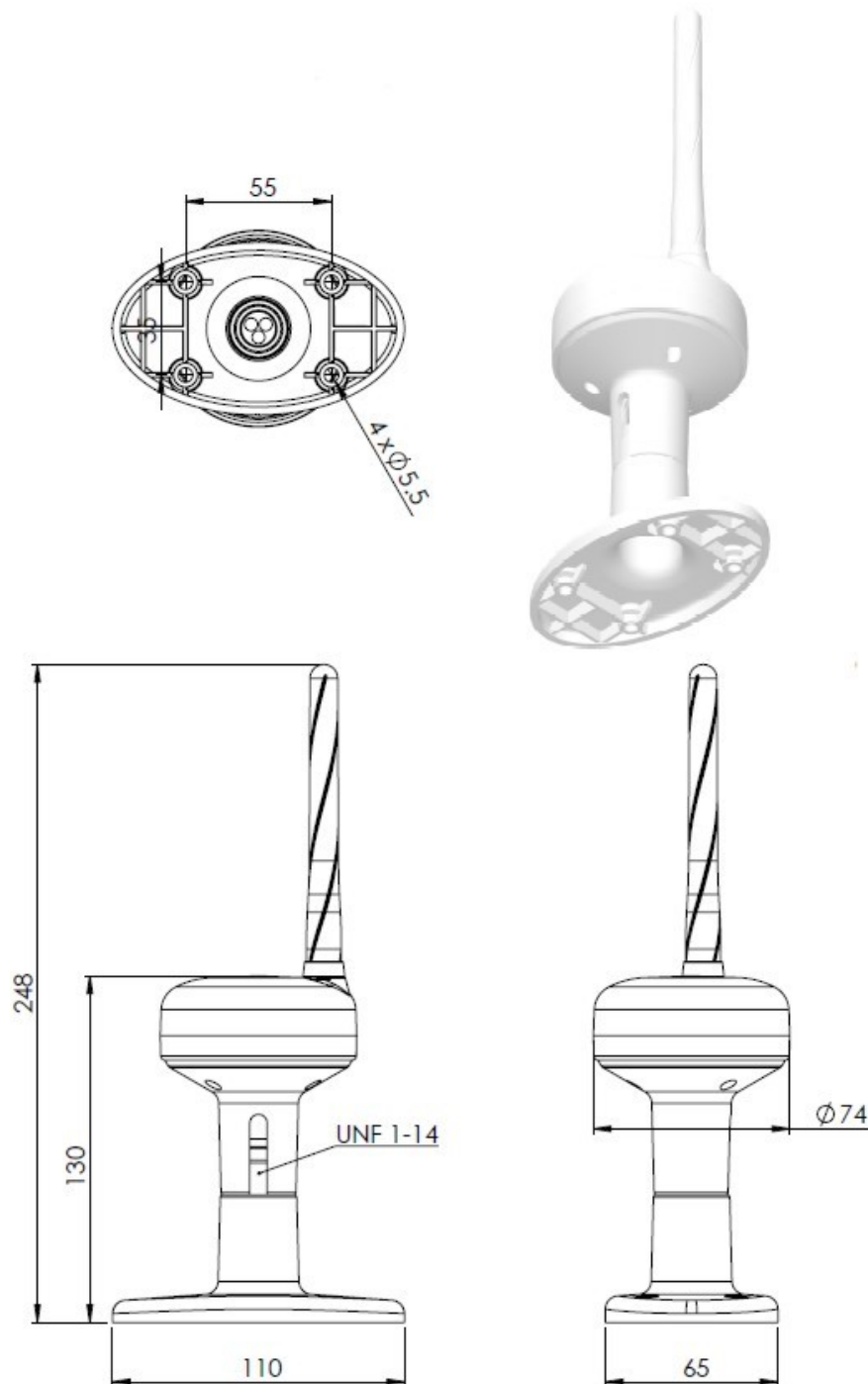
Cable 2(AIS)

Connector type: FME female
Cable type: RG58W (White)
Cable length: 10m

- Cable length is part of antenna tuning and is not recommended to change it but if you need different connector type please ask our sales team

1.3. Mechanical Specifications and Dimensions

Material: ABS
Max. dimensions: 248mm x 110mm x 74mm (H x L x W)
Colour: White (for different colours please ask our sales team)



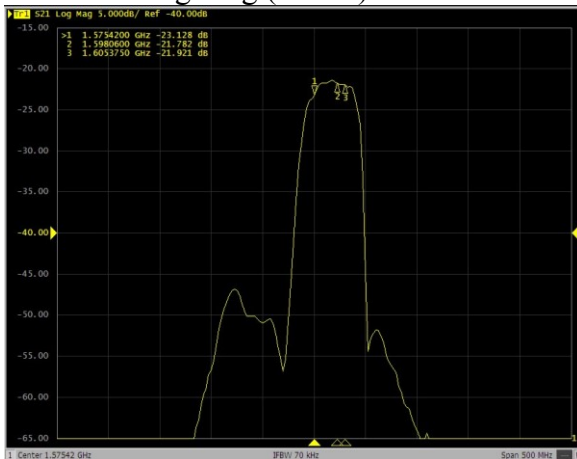
2. MEASUREMENT

- Antenna was tested with 30cm of RG58 in anechoic chamber

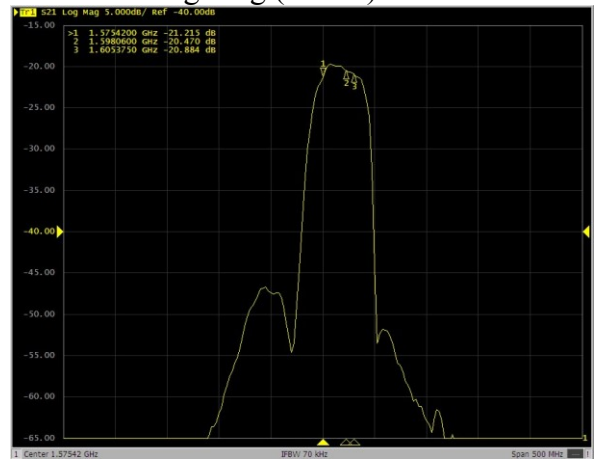
2.1. GNSS

2.1.1. Antenna Gain (S21)

Log Mag (GNSS) at 3V

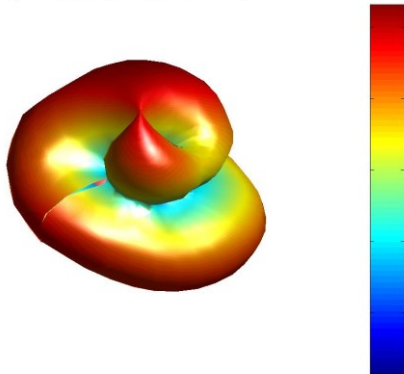


Log Mag (GNSS) at 5V

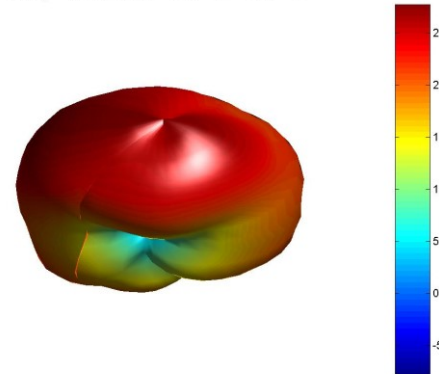


2.1.2. 3D radiation pattern

Freq = 1.5754GHz Az= 45 EL= 45



Freq = 1.6054GHz Az= 45 EL= 45



Freq = 1.5979GHz Az= 45 EL= 45

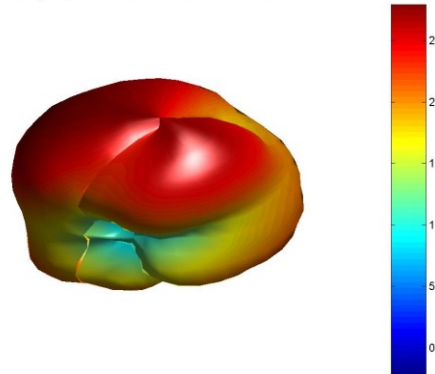


Figure 1- 3D spherical chart for center frequency

2.2. AIS

2.2.1. Real test

Boat Star Trust was tracked at that time of testing AIS antenna. Measured distance to this boat was 18.5nm



(Mapping courtesy of www.marinetraffic.com/ais)

2.2.2. S11

- Antenna was measured with 10m of RG58

