

# Marine GPS/VHF/UHF Antenna

## MODEL: GUV-650

FOR Marine VHF Radio & GPS Navigation



### GPS Antenna Specifications: GA65

PHYSICAL CONDITION	
Constructions:	Polycarbonate radome, detachable cable/connector for easy mount, rubber-O-ring between top radome and screw base for waterproof
Dimensions:	60mm(Dia.) x 45mm(H)
Weight:	65grams (w/o cable & connector).
Color:	White or Black (Optional)
Mounting:	Bulkhead mount with 0.8 inch threaded wing nut (standard accessory).
Cable & Connector	
RF cable:	SMA(M)-10M RG58 -TNC(M) or Optional
Pulling strength:	6 Kg @ 5sec. molded plastic on connector end for strain relief.
Connector available:	SMA(F)
Antenna Element	
Center Frequency:	1575.42 MHz +/-1.023 MHz
Polarization:	R.H.C.P. (Right Handed Circular Polarization).
Absolute Gain @ Zenith:	+5 dBi typical.
Gain @ 10° Elevation:	-1 dBi typical.
Axial Ratio:	3 dB max.
Output VSWR:	2.0
Output Impedance:	50 ohm
Low Noise Amplifier	
Center Frequency:	1575.42 +/- 1.023 MHz
Power Gain:	28 db +/-3db
Bandwidth:	10 MHz min. @S11<=-10 dB
Noise Figure:	1.5
Outer Band Attenuation:	3 dB max.
Supply Voltages:	2.5~5.5V DC.
Current consumption:	at 2.5V 6.6mA Typ.

<b>BJTEK Navigation Inc.</b>	at 3.0V 8.6mA Typ. at 4.0V 12.6mA Typ. at 5.0V 16.6mA Typ.	<a href="https://www.bjnav.com/">https://www.bjnav.com/</a>
Filter	20dB 25dB @ fo+/- 50MHz 30dB 35dB @ fo+/- 100MHz * fo=1575.42MHz	
<b>Overall Performance: (antenna element, LNA &amp; coax cable)</b>		
Center Frequency:	1575.42 +/- 1.023 MHz	
Gain:	At 90° vertical to sky 30 ± 4.5dBi (cable loss) Note:1 Mounted on the 60mm x 60mm square ground plane	
Noise Figure:	1.5 max.	
Axial Ratio:	3 dB max.	
Bandwidth:	10 MHz min. @S11≤-10 dB	
VSWR:	2.0 max.	
Output Impedance:	50 ohm	
<b>Environmental</b>		
Operating Temperature:	-40°C~ +100°C.	
Storage Temperature:	-40°C~ +100°C.	
Relative Humidity:	95% non-condensing.	
Water Resistance:	100% waterproof. IPX6	

## Marine UHF/VHF Dual Band Antenna

### MODEL: UVA-1400



This document provides a Sleeve Dipole Antenna design .

#### 1.. GENERAL DESCRIPTION

Model No	P/N
	UVA-1400

Below is a table summarizing the antenna design specification.

#### 1.1 Electrical Properties

Parameter	Description
Frequency Band	144 / 430 MHz
<b>BJTEK Navigation Inc.</b>	<a href="https://www.bjnav.com/">https://www.bjnav.com/</a>

<b>BJTEK Navigation Inc.</b> Nominal Impedance	50 ohm	<a href="https://www.bjnav.com/">https://www.bjnav.com/</a>
Polarization	Vertical	
V.S.W.R	1.5:1	
Power	100W	

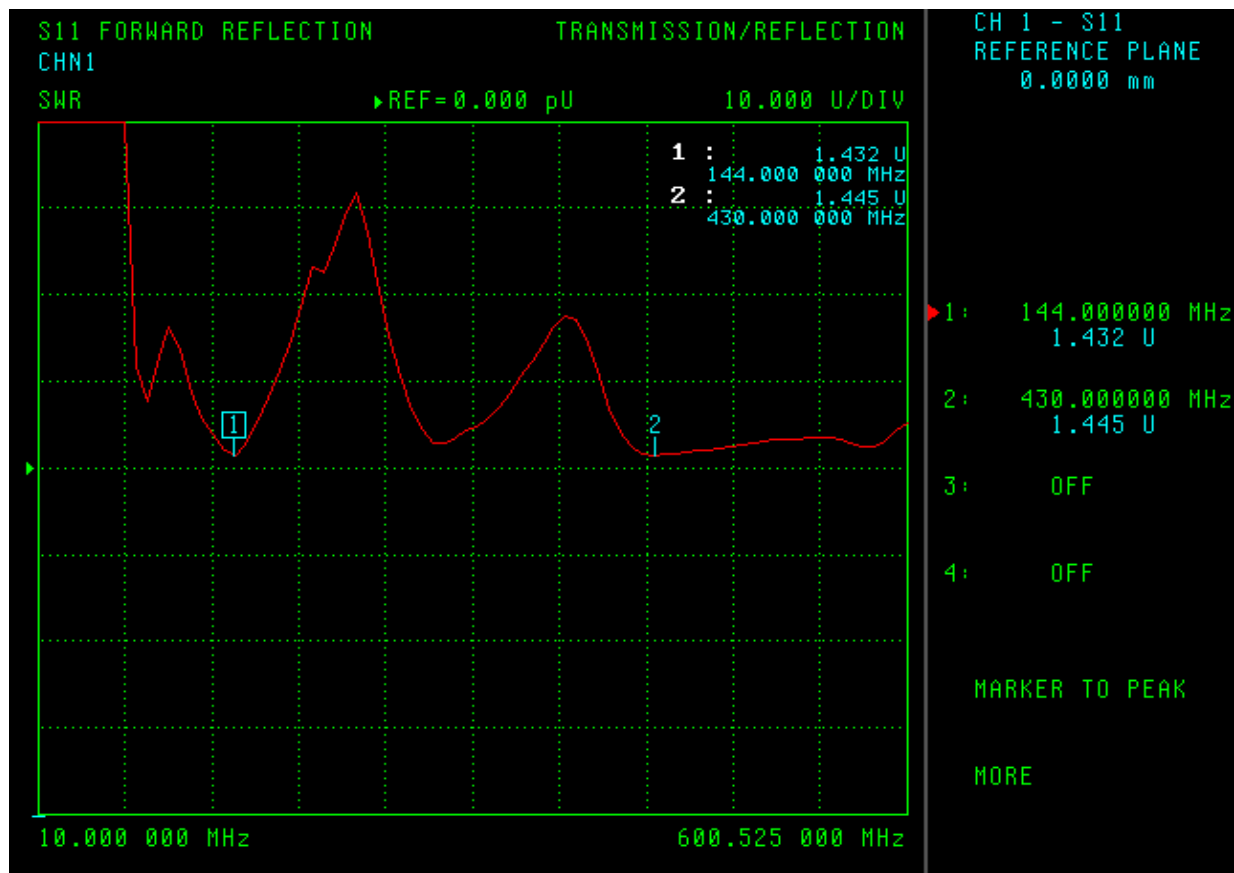
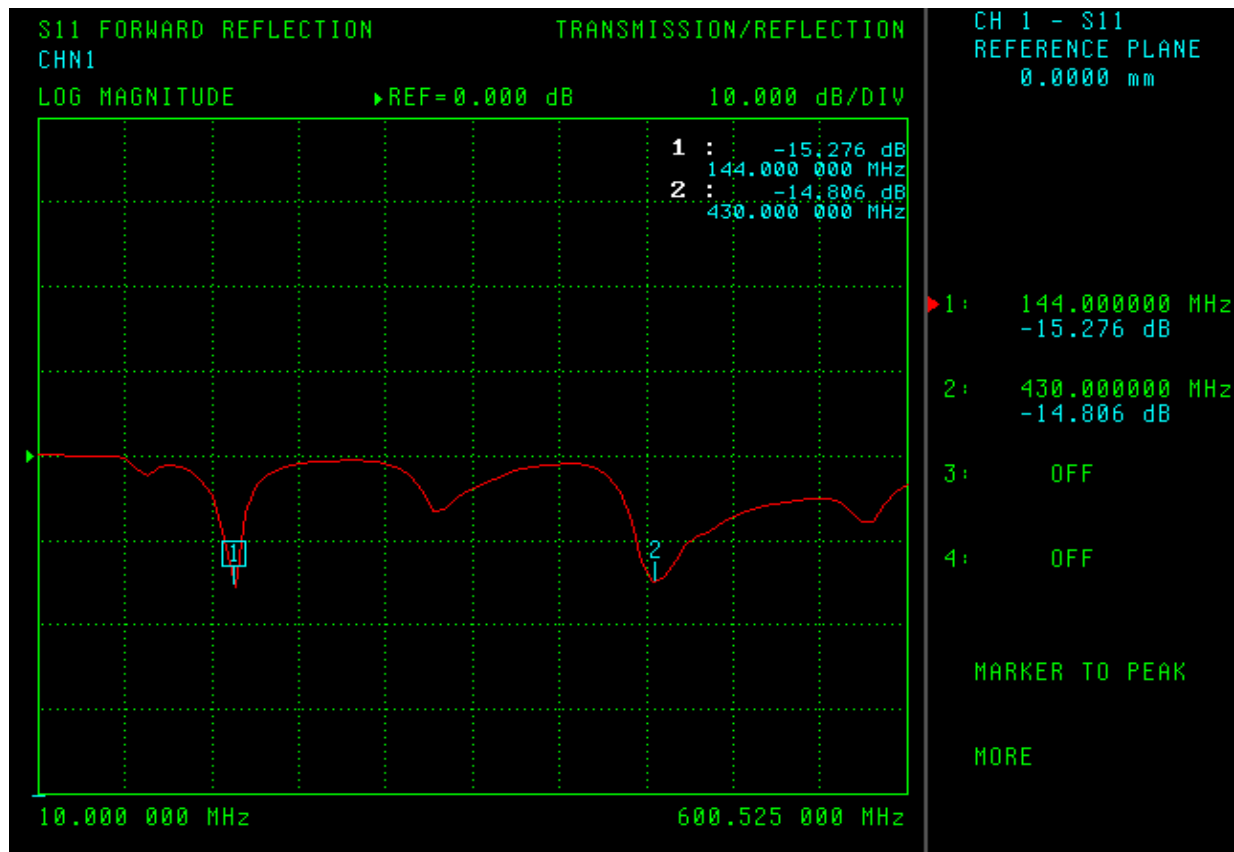
## 1.2 Mechanical Properties

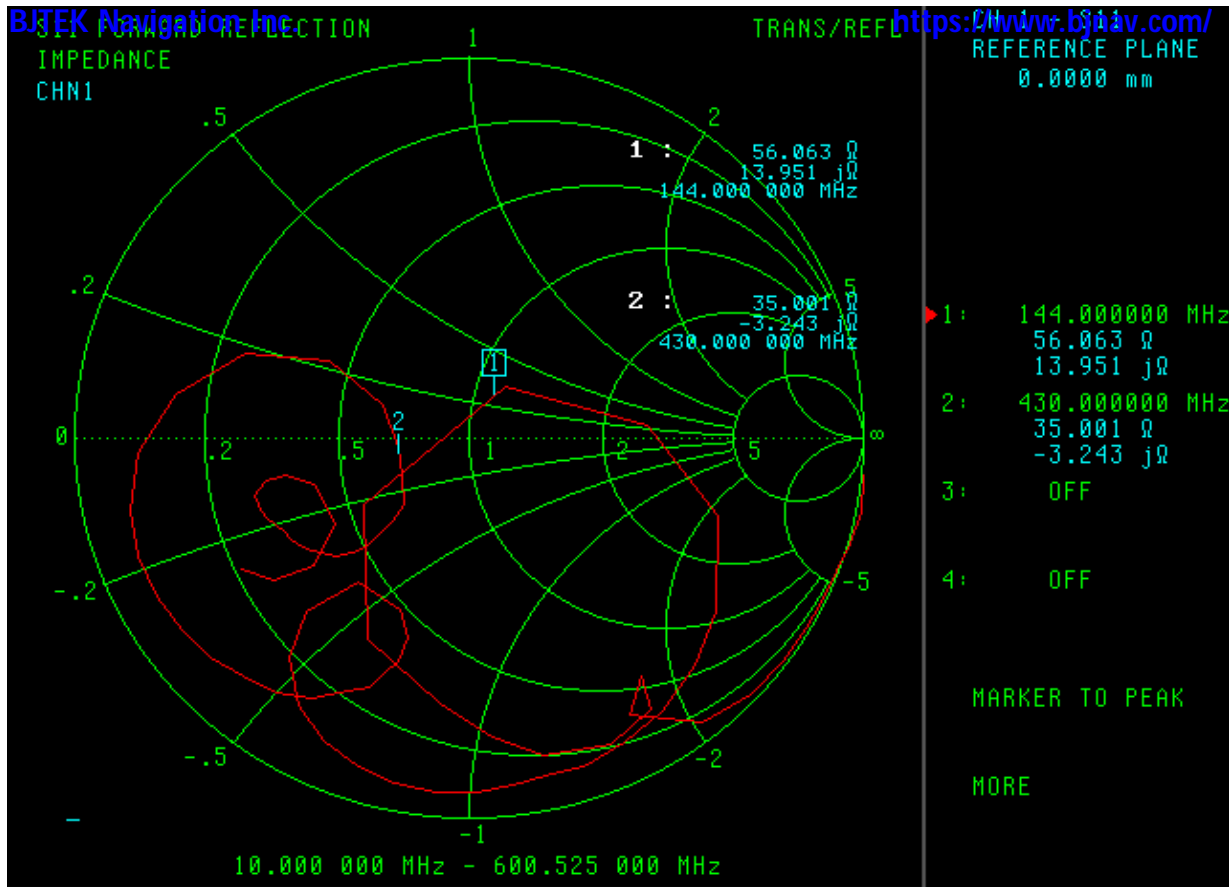
Parameter	Description
Antenna Type	Omni-Directional Antenna
Material	Fiberglass
Touch Type	Screw Type
Connector Type	PL259 connector (Female)
Antenna Dimensions	1400 mm ±10
Antenna Color	White
Operating Temperature Range	-20°C~+60°C
Storage Temperature Range	-30°C~+70°C

NO.	NAME	QTY
01	Body	01
02	Cap	01
03	Srv ring(Stainless steel)	01
04	Round iron washer	01
05	Hexagonal nut	01
06	Clip retaining	02
07	U-Circle	02
08	Hexagonal nut	02
09	Round iron washer	04
10	Hexagonal nut	04
11	Hexagonal plate band	01
12	PL259 Connector	01

CUSTOMER'S	MODEL	PARTS NUMBER	FREQUENCY	UNIT	SCALE	DATE	VERSION
			144/480 MHz	V/M		20120103	1
TOLERANCE	± 0.1MM, 15	NAME	PARTS NUMBER	APPROVED CHECKED	DRAWING DESIGNER		
SURFACE ROUGHNESS	√	APPEARANCE					

Third angle projection





\* This specification is subject to change without prior notice

Data Updated: FEB.07, 2012

