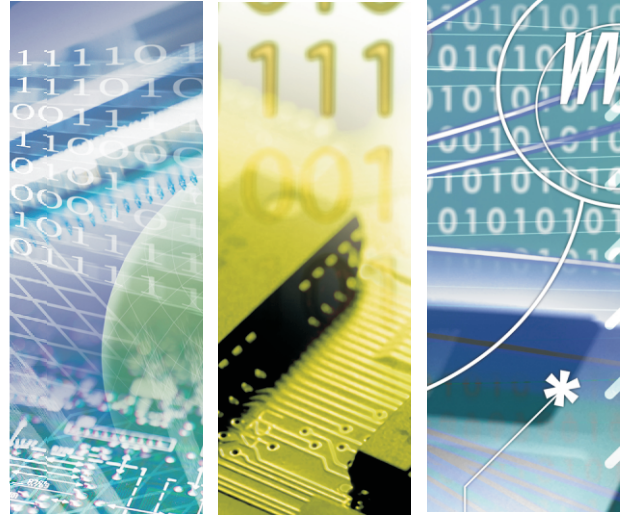




# TWRN-075230x-251

GPS Antenna



TWRN-075230x-251

High Sensitivity Type GPS Antenna

## Introduction of Product

Bointec TWRM-075230x-251 is GPS bands antenna for GPS application. With SMA connector female.

TWRM-075230x-251 GPS Antenna provides a perfect solution for system integrator house who need a flexible, magnetic GPS antenna. It is housed in leak tested packaging designed to withstand continuous exposure to shock, excessive vibration, extreme temperatures, water and sunlight. For added reliability, the antenna cable can be threaded through a fix rack to keep it safe from vibrations when vehicle moving or such kind of damage.

Bointec TWRM-075230x-251 GPS Antenna includes advanced filtering technology for reliable performance in hostile RF jamming environments. This antenna is also a high-quality solution for adding GPS data to marine navigation systems.

## Product Highlight

- Magnetic Type, stick on any kinds of metal surface
- Passive and Active type for different kinds of host device
- Water proof type
- Extent cable are able to customized requirement
- Simple, easy deployment
- RoHS compliant
- Weight of Antenna:52.2g



# Specification

## Electronical Data

<b>Frequency</b>	1575.42(+/-) 3MHz
<b>VSWR</b>	1.5 max.
<b>Bandwidth</b>	10MHz /20MHz min. at -10dB
<b>Axial Ratio</b>	3dB typical
<b>Impedance</b>	50 Ohm
<b>Peak Gain</b>	2.5dBic/4dBic min at 0 degree (7cm*7cm ground plane)
<b>Gain Coverage</b>	>= -4dBic at -90 degree< 0/ <= 90 degree (over 75% volume)
<b>Power Handling</b>	1Watt
<b>Polarization</b>	RHCP

## Environmental

<b>Working temperature</b>	-40~+85 degree C
<b>Storage temperature</b>	-50~+85 degree C
<b>Vibration</b>	Sine sweep, 1G(0-P),10-150-10Hz each axis
<b>Humidity</b>	95%~100RH
<b>EMC</b>	ETSI EN 301 489-19 V1.2.1: 2002
<b>Degrees of Protection</b>	IP56 (dust and water proof)
<b>ESD test</b>	IEC 61000-4-2:1995/A1:1998/A2:2000

## Mechanical Specification

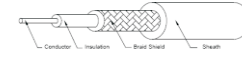
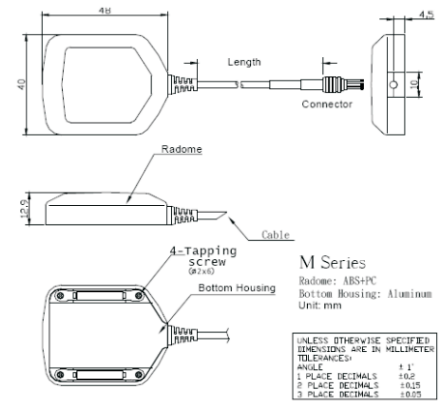
<b>Weight (without cable)</b>	42 grams max.
<b>Size</b>	48 * 40 * 13 mm
<b>Connector</b>	SMA Male/Male
<b>RF cable</b>	RG174
<b>Mounting</b>	Magnetic Based
<b>Housing Color</b>	Black

## Amplifier Module

Model Number	TWRN-0752301-251	TWRN-0752302-251
<b>Type</b>	Active	Passive
<b>Gain without Cable</b>	27dB typical	4dB typical at 0 degree(Peak)
<b>Noise Figure</b>	1.8dB typical	
<b>Output VSWR</b>	2.0max	
<b>Bandwidth</b>		20MHz at -10dB
<b>Axial Ratio</b>		3dB typical
<b>VSWR</b>		1.5max
<b>Filtering</b>	+/- 40MHz 9dB +/- 70MHz 20dB +/- 100MHz 30dB	
<b>DC voltage</b>	DC2.7V to 6.0V	
<b>DC Current</b>	8.5+/- 1 4.5mA	

## Gain Pattern

Model Number	TWRN-0752301-251	TWRN-0752302-251
<b>Peak Gain at 0 degree</b>	22.3dB	1.1dB
<b>Axial Ratio</b>	2dB	1.5dB
<b>Test Condition</b>	5V cable, 5mRG174 / loss around 6dB	18cm RG174 /loss around 1dB



SMA Male(Plug)



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