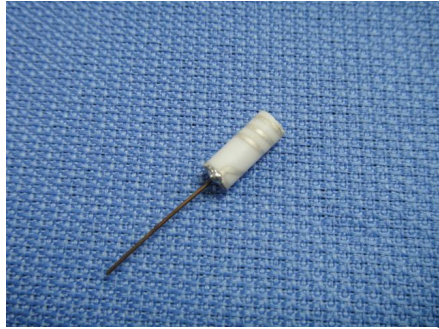


# Helix GPS Antenna

## MODEL: IA100-GPS



- Operation temperature: -35°C to +85°C
- Frequency range:  
1575MHz  
OD5mm x 12mm ( without pcb and touch Line)

This product specifications are applied to the helical antenna composed of helix on the dielectric material and conducting mechanism used for the wireless communication system. **Please contact us when using this product for any other applications than described in the above.**

### 1.Specifications

#### 1.1 Electrical

✧ Operation Frequency

1575Mhz

VSWR: < 2.0 at frequencies

Antenna Average Gain : -2~0dbi

✧ Impedance

- 50Ω

✧ Power Handling

- Input power 1.5 Watt max.

#### 1.2 Mechanical

- Attached drawing for reference

### 2. Environmental Conditions

✧ Operation Temperature

At the temperature range from -25°C~+85°C, the device shall satisfy the electrical specifications.

### 3.Soldering Conditions

✧ Mechanical Soldering

Soldering Temperature : 340°C± 5°C

Soldering Time : 5s. (reference)

## 4. Notices

### ✧ Environment Conditions

This product is designed for use of electrical equipment in the environment (temperature, humidity, atmospheric pressure and etc.) specified in this approval drawing: it may not be used in the following environments or under the following conditions:

- Ambient air containing corrosive gas( $\text{Cl}_2$ ,  $\text{H}_2\text{S}$ ,  $\text{NH}_3$ ,  $\text{SO}_x$ ,  $\text{NO}_x$ , etc.)
- Ambient air containing volatile or combustible gas.
- In liquid (water, oil, chemical solution, organic solvents, etc.)
- In environments with a high concentration of airborne particles.
- In direct sunlight.
- Other environments similar to the above conditions.

### ✧ Contact the manufacturer before using the product in any of the above environments or under any of the above condition

### ✧ Limitation of Applications

Please contact us before using our products for the applications listed below which require especially high reliability for the prevention of defects which might directly cause damage to the third party's life, body or property.

- Aircraft equipment
- Aerospace equipment
- Undersea equipment
- Medical equipment
- Transportation equipment
- Disaster prevention / crime prevention equipment
- Data-processing equipment
- Application of similar complexity and / or with reliability

Requirements to the applications listed in the above

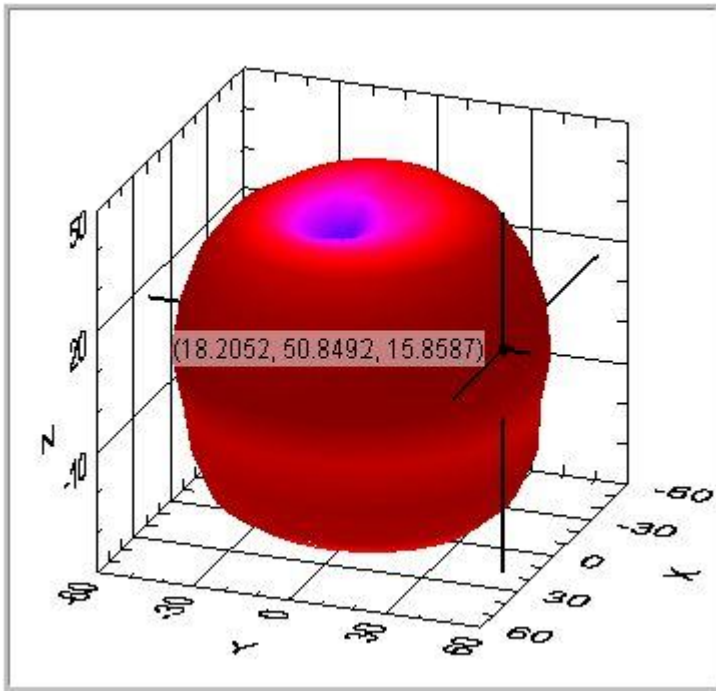
### ✧ Please make sure that your product has been evaluated and confirmed against your specifications when our product is mounted to your product.

### ✧ All the items and parameters in this product specification have been prescribed on the premise that our product is used for the purpose, under the condition and in the environment agreed upon between you and us. You are requested not to use our product deviating from such agreement.

### ✧ Please return one duplicate of this product specification to us with your receipt signature. If the duplicate is not returned within two months, this product specification will be deemed to have been received by you.

### ✧ We consider it not appropriate to include other terms and conditions for transaction warranty in product such terms and conditions as warranty clause, product liability clause, terms and conditions unless they are based on the governmental regulation or they are stated in a separate contract agreement.

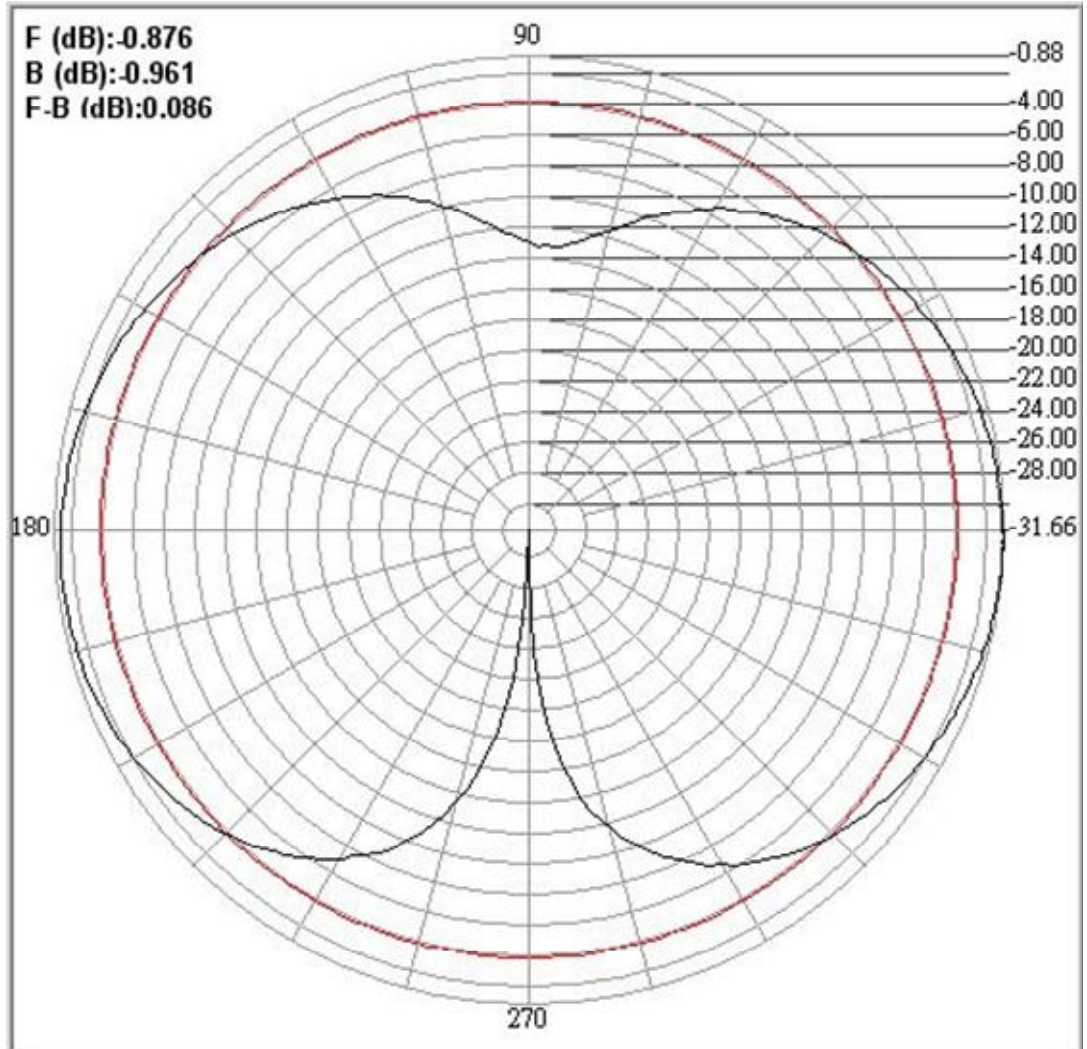
## 二、 RADIATION PATTERNS



Job No.:ST-0408-900-1  
 Standard:  
 Test Distance:  
 Date:2006/4/8  
 Temp.(°C) / Hum.(%):25°C/80%  
 Company:  
 Model:

Test Item:  
 Instrument:  
 Ant. Polar:H  
 Time:下午 05:02  
 Test By:  
 Trade Name:

Test Mode / Description:



Center freq.(MHz): <b>900</b>	Plane : <b>E Plane</b>	
Max gain(dBi) : <b>-0.88</b>	Min gain(dBi) : <b>-31.66</b>	Avg gain(dBi) : <b>-2.75</b>
-3dB1(°) : <b>401.90</b>	-3dB2(°) : <b>312.80</b>	HPB(°) : <b>89.10</b>
Front (dB) : <b>-0.876</b>	Back (dB) : <b>-0.961</b>	F B Ratio (dB) : <b>0.086</b>