



普傑國際股份有限公司

PROFESSOR TECHNOLOGY CO., LTD.

## PRODUCT SPECIFICATION

### 產品承認書

Customer: \_\_\_\_\_

Product Name: Active GPS Antenna

Model No: CPG11H

Production Region: TAIWAN

Version: English

Customer Approval Stamp.

Date: \_\_\_ / \_\_\_ / \_\_\_.

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Model No:

CPG11H

Date:

19/Jan/2005

Checked by:

Approved by:

**PROFESSOR TECHNOLOGY CO., LTD.**

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## Specification 規格

### 1.0 CONFIGURATION

1.1	RF Cable	RG174 , $\varnothing 2.5 \pm 0.05\text{mm}$ Double Shield, Black.	
		Cable Length	200mm $\pm$ 5mm
1.2	RF Connector	SMA(Male)	

### 2.0 GENERAL

#### 2.1 ENVIRONMENTAL CONDITIONS

2.1.1	Operation Temperature	-30°C to + 80°C
2.1.2	Storage Temperatur	-40°C to + 100°C
2.1.3	Relative Humidity	40% to 95%

#### 2.2 ELECTRICAL SPECIFICATIONS

2.2.1	Input Voltage	3V~5V	
2.2.2	Power Consumption	At 3.0 V	Typ: 13mA. Max: 16mA.
		At 5.0 V	Typ: 18mA. Max: 22mA.

#### 2.3 MECHANICAL SPECIFICATIONS

2.3.1	Mounting	Magnet mount.
2.3.2	Horizontal Pulling Force of Magnet	1.5 Kg Min.
2.3.3	Water Proof	100 % water proof.
2.3.4	Shock	10msec. Half sine wave.
2.3.5	Magnet Threshold	The antenna must stay atatched to the vehicle, at a speed of 180 km/h.
2.3.6	Housing Material	ABS (Black)
2.3.7	Weight	105g Max.
2.3.8	Dimension	See Page. 4

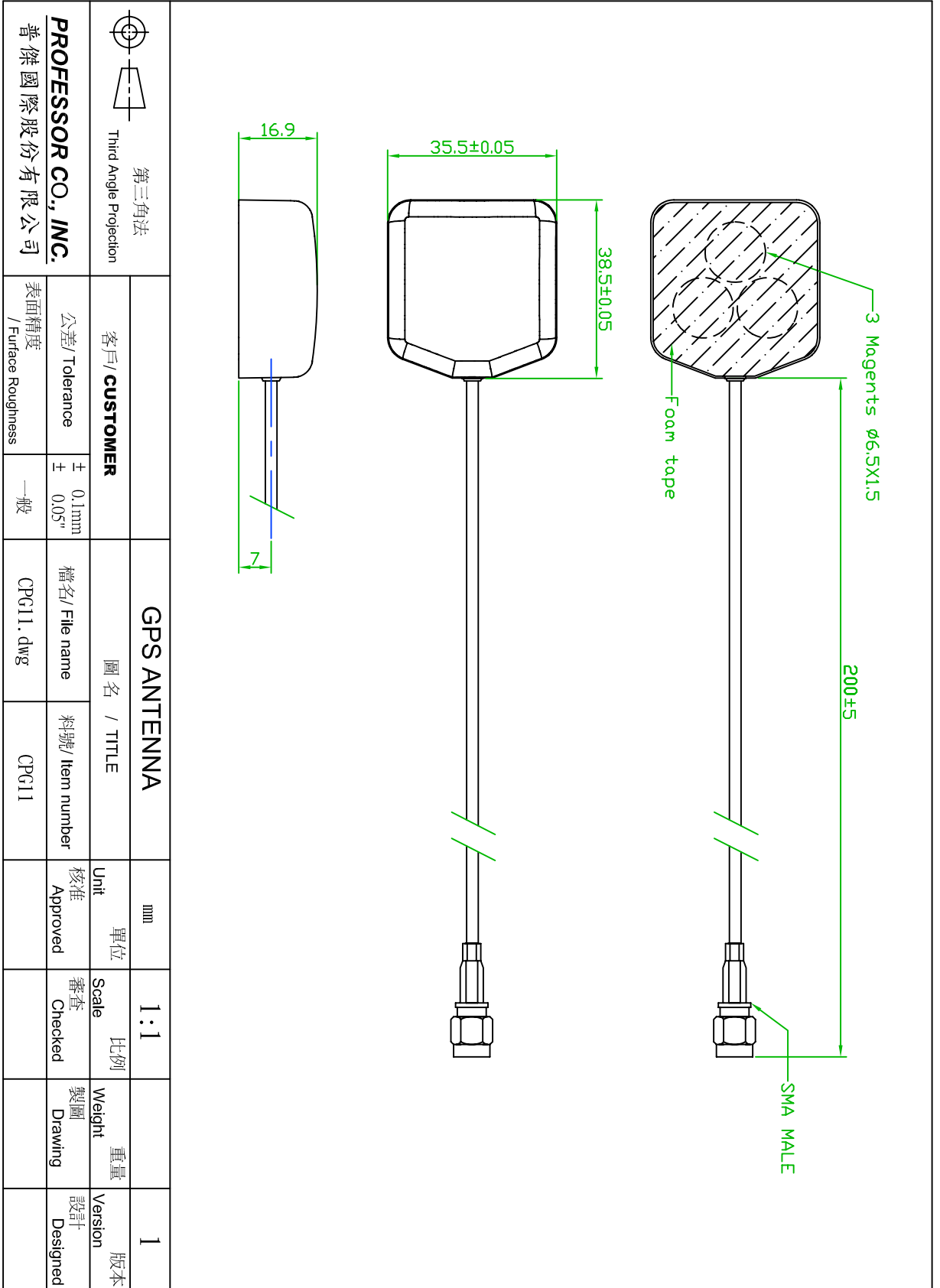
### 3.0 ANTENNA

3.1	Frequency Range	1575.42 $\pm$ 1.023 MHz.
3.2	Gain	90° : 2.0 dBi Min. 20° : -5.0 dBi Min.
		Mounted on the 60mm*60mm ground plane.
3.3	Polarization	RHCP
3.4	Axial Ratio	90° : Max 3.0dB
		Mounted on the 60mm*60mm ground plane.

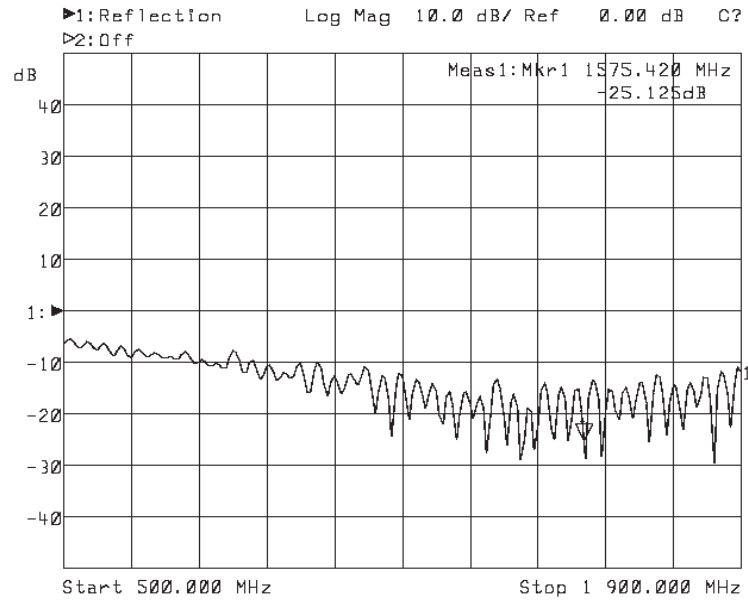
#### 4.0 LNA

4.1	Frequency Range	1575.42 ± 1.023 MHz
4.2	Gain	28 ± 4.5dB ( +25 ± 5 )
4.3	Noise Figure	1.5 dB Max. ( +25 ± 5 ) 2.2 dB Max. ( +85 )
4.4	Out Band Rejection	fo = 1575.42MHz fo ± 20 MHz 7dB MIN fo ± 30 MHz 12dB MIN fo ± 50 MHz 20dB MIN fo ± 100 MHz 30dB MIN
4.5	Output Impedance	50
4.6	Output VSWR	2.0 Max

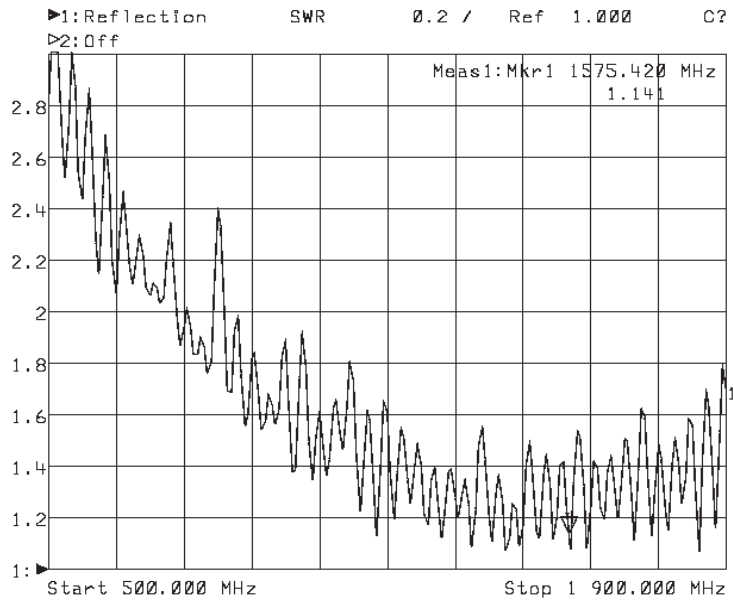
**OUTLAY**  
外觀圖



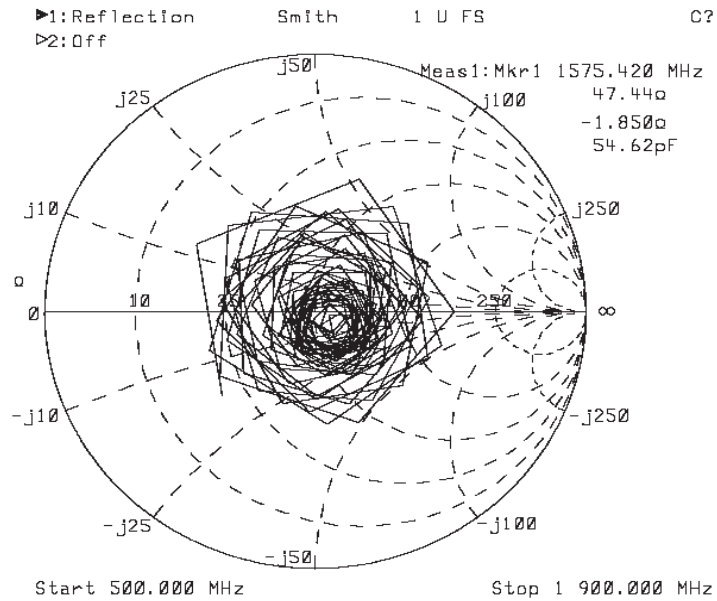
# Antenna Pattern 測試圖



1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1> 1575.4200	-25.125		

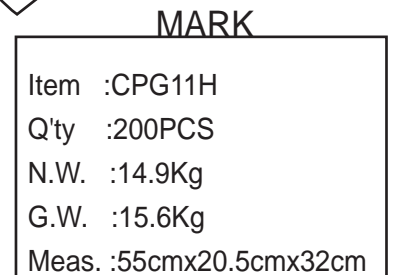
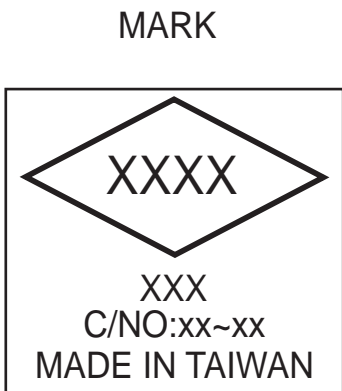
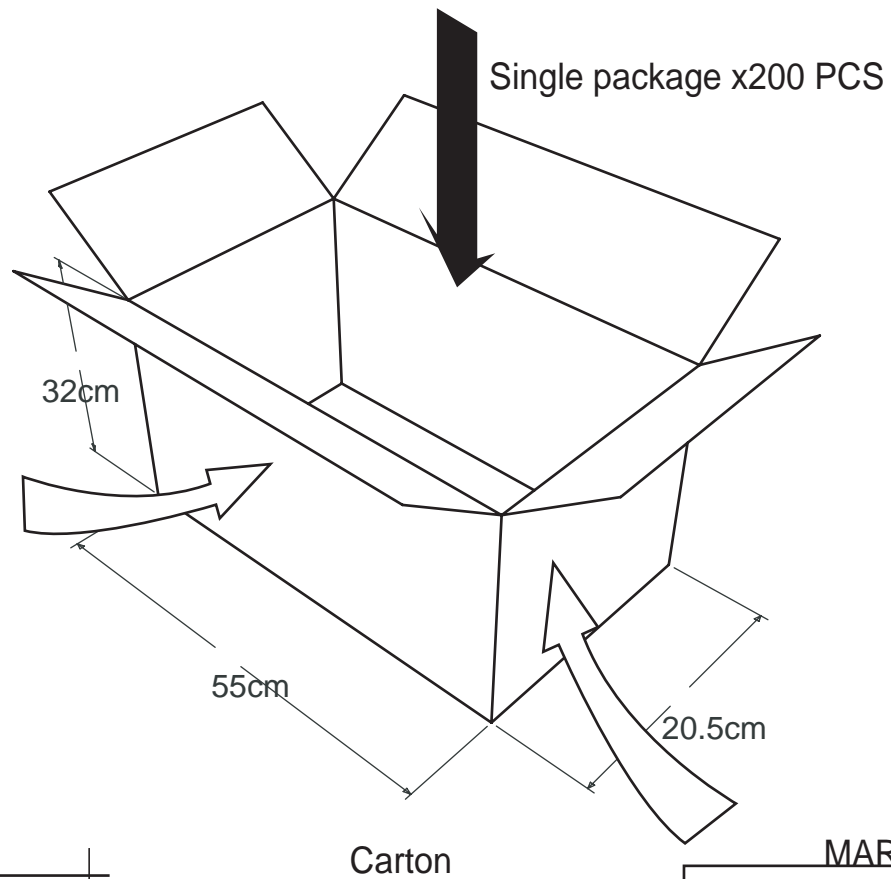
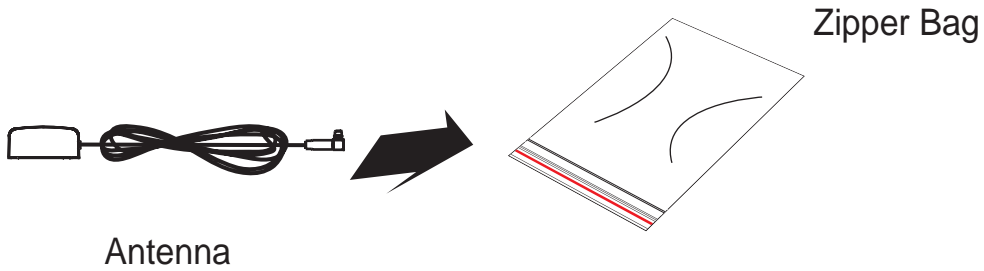


1: Mkr (MHz)	dB	2: Mkr (MHz)	dB
1> 1575.4200	1.141		



1: Mkr (MHz)	Ohm	Ohm	2: Mkr (MHz)	dB
1 > 1575.420	47.44	-1.850		

# Carton Packaging Construction 外箱包裝



Quantity Master Carton	200PCS
N.W. Master Carton	14.9Kg
G.W. Master Carton	15.6Kg