

ANTENNA PRODUCTS

DATA SHEET

GPS Active Antenna (21*15*7 mm)

2007, Jan Rev.1

GPS active antenna (21*15*7 mm)				CAN 431343595158 1B				—	1	Jan, 07	
								▶	2		
								—	3		
BY / 製定者	Sunwiun Hu	SUPER / 原圖編號	C.T.Lee	TLL. SH/ 共頁	10	PAGE/ 頁	1	SH nr.	—	4	
CHECK				DATE / 日期	Jan, 2007			—	▶	5	

**GPS ACTIVE ANTENNA
FOR GLOBAL POSITIONING SYSTEMS (1.575G Hz)**

Product Specification¹

Ceramic Patch Antenna

Outline Dimension:	15*15*4 mm (Ceramic Patch)
Ground Plane	15*15*0.15 mm
Central Frequency	1575 +/- 3MHz
Impedance	50 Ohm
Gain	+1.0 dBi (Typ. base on 40*40 mm ground plane)
VSWR	2.0 max
Polarization	Right Hand Circular Polarization
Axis Ratio	3 dB max (Elevation 90 degree)

LNA

Central Frequency	1575 +/- 1.023 MHz
Gain	16 +/- 1 dB (at f _c , without SAW filter)
Noise Figure	1.5 dB typ. (at f _c , 1.8dB Max)
Output VSWR	2.0 (at f _c)
Supply Voltage	3 +/- 5% V
Current Consumption	5 mA max (Typ. 2.5 –3 mA)
Output Impedance	50 Ohm
Operating Temperature/Humidity	-30 - +85 °C; < 95%
Storage Temperature	-40 - +125 °C

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CHECK				DATE / 日期	Jan, 2007			—	5		

Description:

Yageo provides an ideal active GPS antenna for your embedded system applications. With 21.5 x 15 x 7.5 mm in size, it best fit into your GPS system with maximum performance.

Key Features:

- Small form factor: 21.5 x 15 x 7.5 mm
- Lead-Free – RoHS/WEEE compliant
- High gain up to 16dB
- Low power consumption
- I-Pex ; Herose and MMCX connector are available.

Applications:

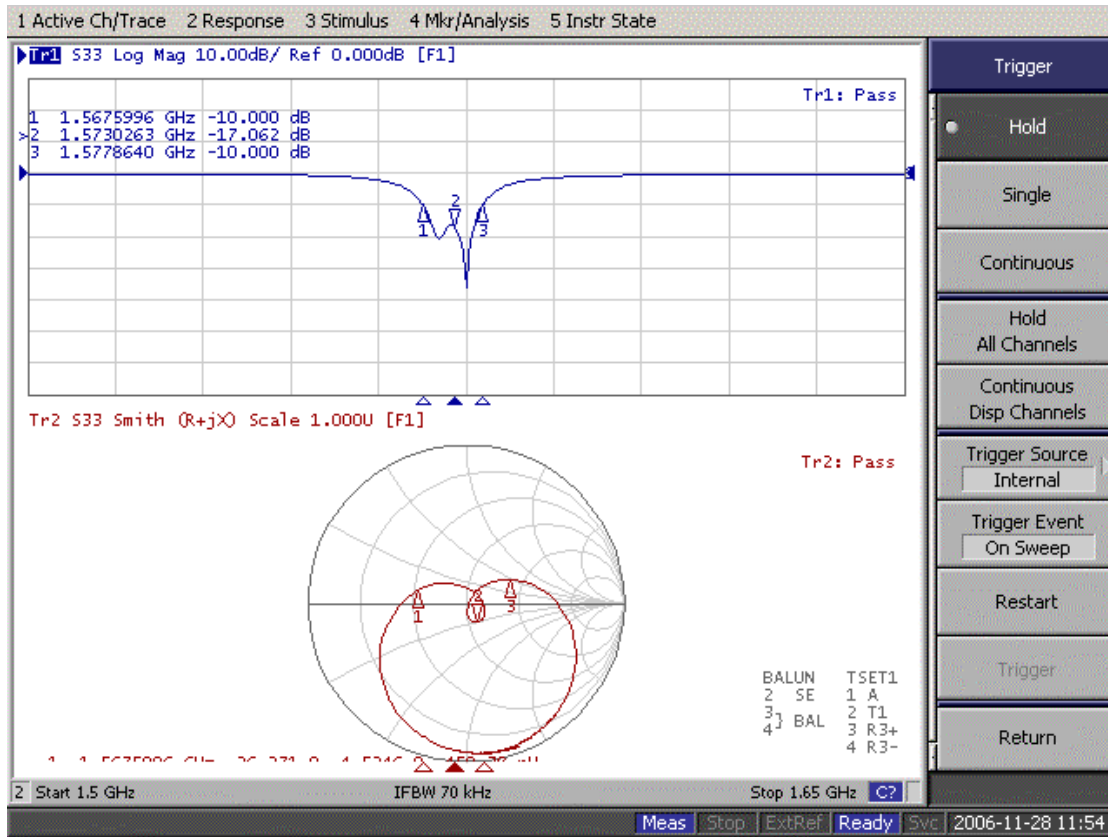
- Handheld devices
- Automotive and Marine Navigation
- Automotive Navigator Tracking
- Emergency Locator
- Geographic Surveying
- Personal Positioning
- Sporting and Recreation
- Embedded applications: PDA, DSC, Smart phone, UMPC, PND, MP4



¹ All the technical data and information contained herein are subject to change without prior notice

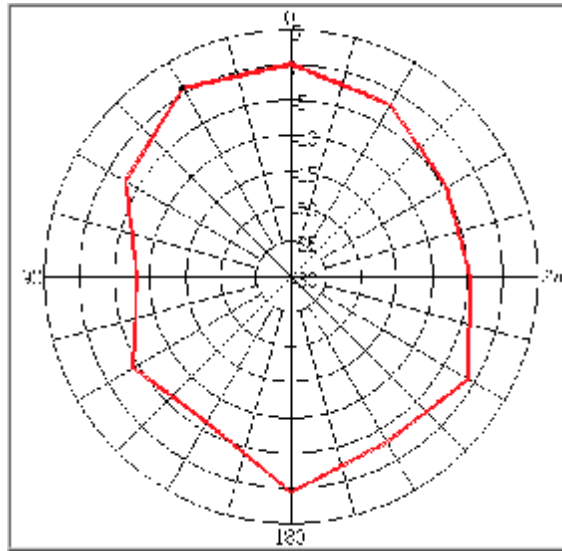
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CHECK				DATE / 日期	Jan, 2007			—	5		

Antenna Return Loss and Impedance (with 40 * 40 mm square Ground Plane)

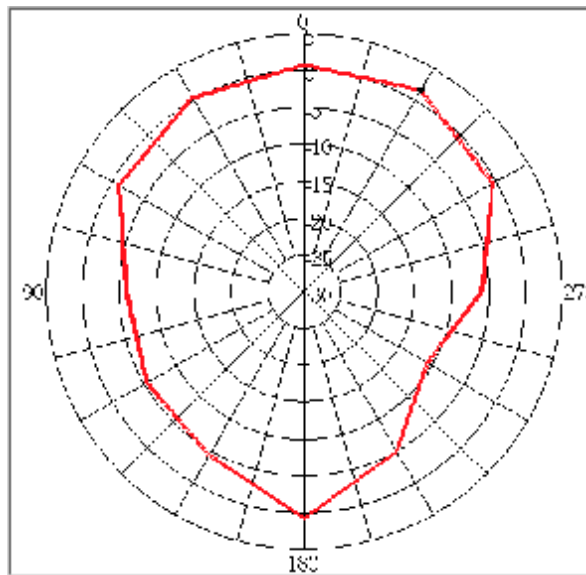


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								▶	2		
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CHECK				DATE / 日期	Jan, 2007			▶	5		

Directivity Chart (with 40 * 40 mm square Ground Plane)



Circular gain 2D x-z plane pattern



Circular gain 2D y-z plane pattern

GPS active antenna (21*15*7 mm)				CAN 431343595158 1B				—	1	Jan, 07	
								▶	2		
								—	3		
BY / 製定者	Sunwiun Hu	SUPER / 原圖編號	C.T.Lee	TLL. SH/ 共頁	10	PAGE/ 頁	5	SH nr.	—	4	
CHECK				DATE / 日期	Jan, 2007		—	5			

The Characteristics of LNA

NF=1.40dB; P1dB=-0.36dBm

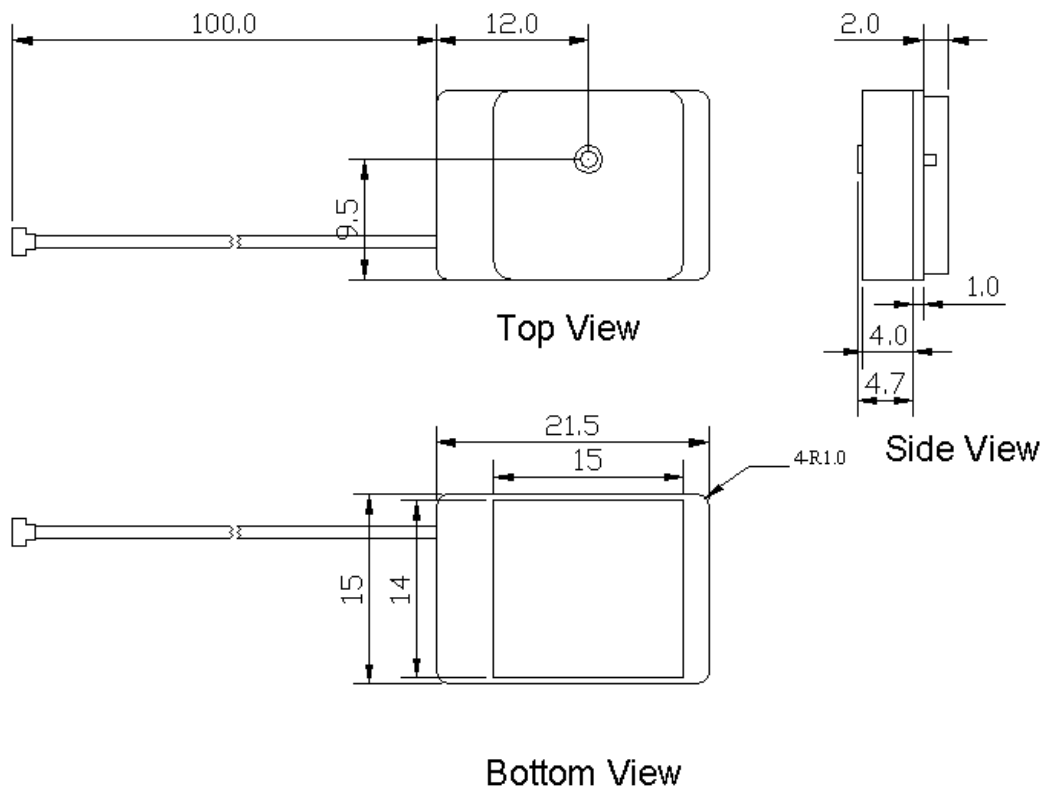


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								2	
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CHECK				DATE / 日期	Jan, 2007			5	

Outlines and Dimension

Dimension

Length	21.5 +/- 0.5 mm
Width	15.0 +/- 0.5 mm
Thickness	7.5 +/- 0.5 mm
Connector	I-pex
Shielding Case	15*14*2 mm



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CHECK				DATE / 日期	Jan, 2007			—	▶	5	

ORDERING INFORMATION:

The active antennas may be ordered by using the Yageo ordering code. These code numbers can be determined by the following rules:

CAN43 13 4 35 95 158 1B
F C M S T A P

F. Family Code

CAN 43 = Antenna

C. Packing Type Code

13 = bulk packaging

M. Materials Code

4 = Microwave Ceramic Material

S. Size code

35 = 21*15 mm

T. Type

95 = GPS active antenna, type 95

A. Working Frequency

158 = 1.575 GHz, GPS application

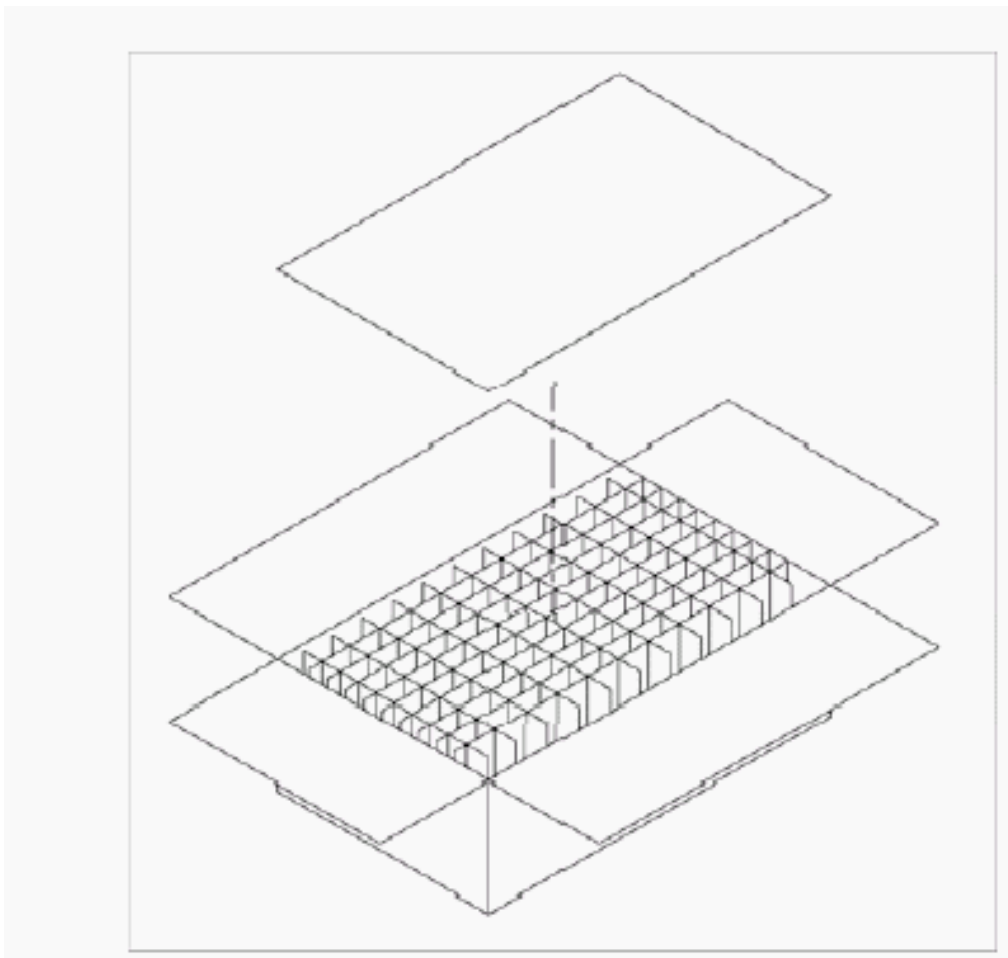
P. Packing Type Code

1B = bulk packaging

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CHECK				DATE / 日期	Jan, 2007			—	5		

Packing information

1. Each unit into individual compartment. Two layers of compartment.
2. 100 units per compartment layer. 200 units into one carton.
3. Carton dimension: 493*257*167 mm
4. Cover upper and lower sides of the box with a cardboard.



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CHECK				DATE / 日期	Jan, 2007			—	▶	5	

Revision Control:

Revision	Date	Content	Remark
1	Jan, 2007	New Issued	

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