



KNCTEK SWITCHABLE GPS ANTENNA KANT-3200B Specification

Version 1.0.2
2005/8/29

This document contains information highly confidential to KNCTEK Company LTD (KNCTEK). It is provided for the sole purpose of the business discussions between supplier and KNCTEK and is covered under the terms of the applicable Non-Disclosure Agreements. Disclosure of this information to other parties is prohibited without the written consent of KNCTEK.

KNCTEK Company LTD.

**RM#401,Eunsung B/D,1576-23,Silim-
dong,Kwanak-ku,SEOUL,KOREA**

TEL: 82-2-839-5701

FAX: 82-2-830-5703

E-Mail: sales@knctek.com

<http://www.knctek.com>



KANT-3200B SPECIFICATION

Introduction

Knctek's KANT-3200B Antenna is specially designed to switch the antenna mode type to the external mode from the internal mode mechanically when the external antenna is being connected. It also returns to the internal mode from external mode when the external antenna is disconnected.

We are proudly introducing this GPS antenna to satisfy the special customer requirement with excellent bandwidth signal and best performance.

| ANTENNA ELEMENT | |
|---|---------------------|
| Center Frequency | 1575.42MHz |
| Polarization | R.H.C.P. |
| Gain @ Zenith | +2 dBi typical |
| Impedance | 50Ω |
| Ground Plane Condition | 60x60 [mm] |
| Frequency may be offset for changes in ground plane and radome. | |
| LOW NOISE AMPLIFIER | |
| Frequency | 1575.42 ±1.023 MHz |
| VSWR | Less than 2.0 |
| Impedance | 50Ω |
| LNA Gain | 28 dB ±2 dB |
| Noise Figure | 2.0dB (max) |
| Voltage | DC +3.0 V (±0.3V) |
| Current | 20mA (max) |
| MECHANICAL | |
| Height | 7.4mm |



KANT-3200B Specification

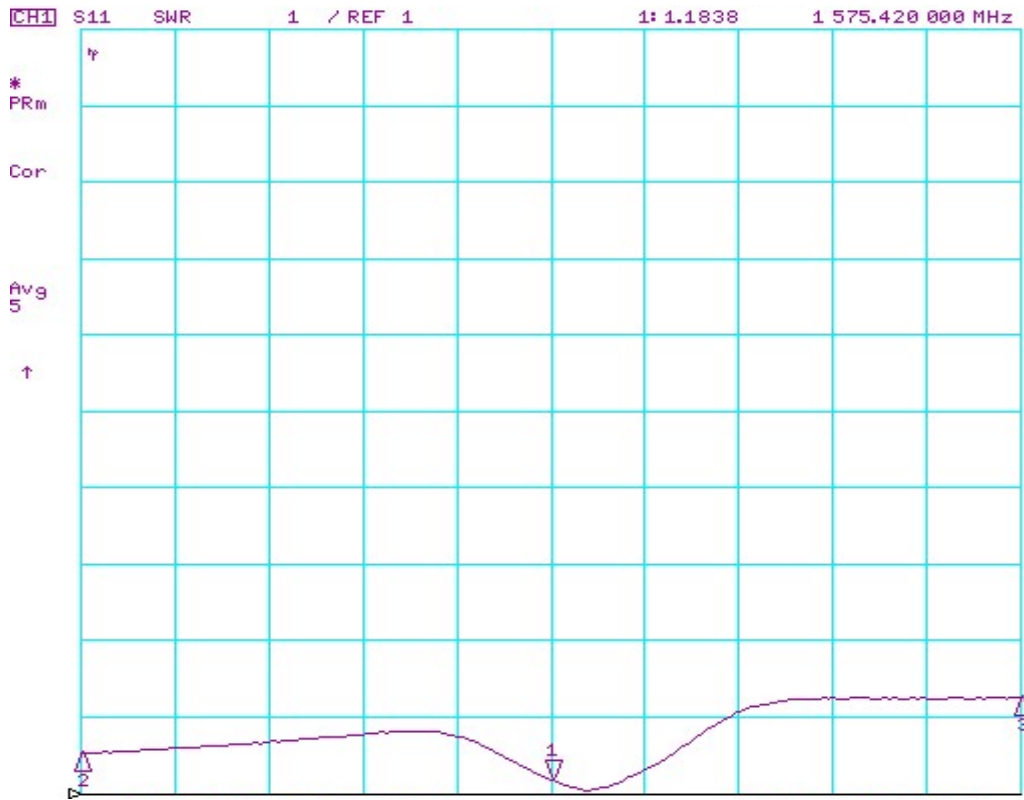
| | |
|---------------------|-----------------------------------|
| Width | 22.0 x 31.5mm |
| Cable | Miniature Cable (Gray Color) 50mm |
| Connector | U.FL |
| External Connector | MCX (Jack) |
| Mounting | - |
| ENVIROMENTAL | |
| Operating Temp. | -30℃ ~ +80℃ |
| Storage Temp. | -40℃ ~ +90℃ |

| | | | | | | | |
|--|----------------------------|--------------------------|------------------|-----------------|----------------|-----------|----------------|
| Buyer | (주) 모바일어플라 이언스 | Inspection Report | | A P P. | Prepared By | Tested By | Approved By |
| Model | KANT-3200B | | | | | | |
| Lot size | 100EA | Test Method | 25 EA/Lot | Inspector | | 이 지 훈 | |
| Lot No. | SAMPLE | Date | | Aug . 27. 2005. | | | |
| Spec No, of Sample Material | Electrical Characteristics | | | | Test Result | | |
| | Current | Gain | N.F | V.S.W.R | | | |
| | Max 20mA | ±2 dB 28 | Max 2.0dB | Max 1:2.0 | | | |
| 1 | 14 | 28.2 | 1.53 | 1.33 | Acc | | |
| 2 | 14 | 28.5 | 1.46 | 1.18 | Acc | | |
| 3 | 13 | 28.1 | 1.50 | 1.35 | Acc | | |
| 4 | 13 | 28.3 | 1.39 | 1.30 | Acc | | |
| 5 | 14 | 27.4 | 1.49 | 1.28 | Acc | | |
| 6 | 14 | 27.7 | 1.50 | 1.24 | Acc | | |
| 7 | 13 | 28.1 | 1.49 | 1.06 | Acc | | |
| 8 | 13 | 28.3 | 1.45 | 1.22 | Acc | | |

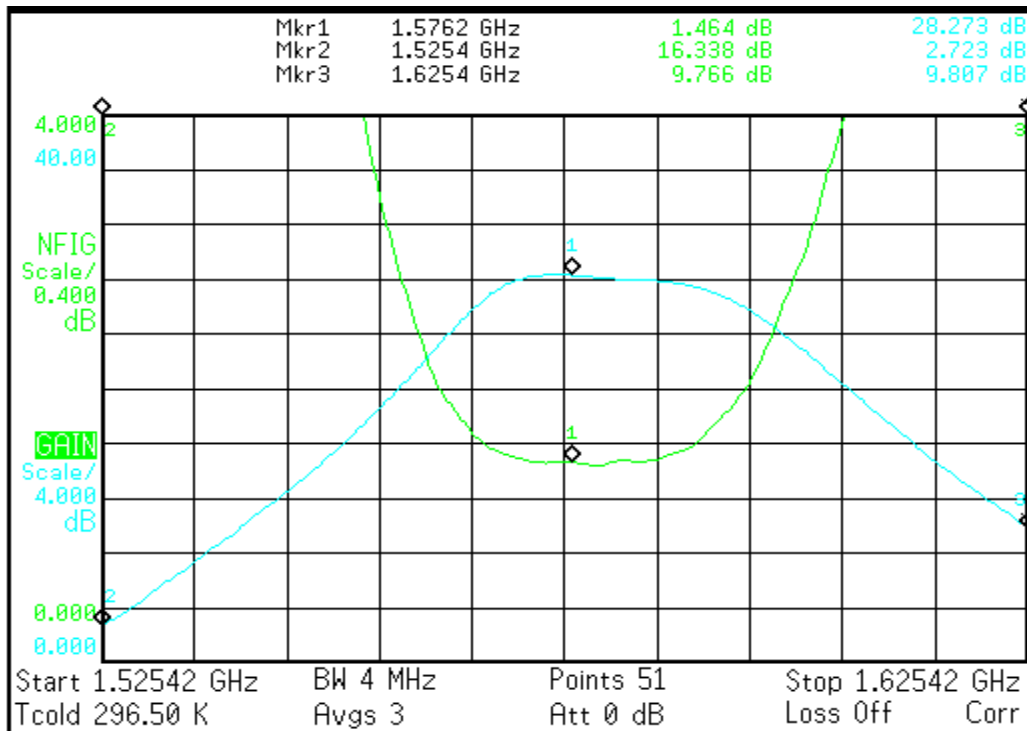


KANT-3200B Specification

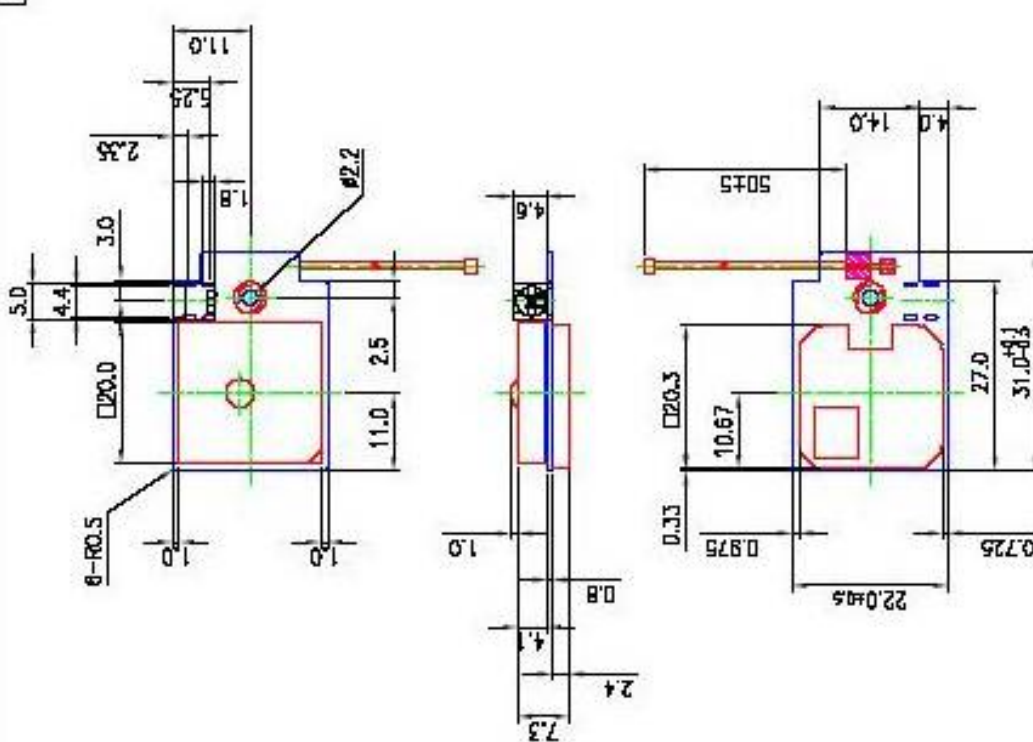
| | | | | | |
|----|----|------|------|------|-----|
| 9 | 14 | 27.3 | 1.57 | 1.12 | Acc |
| 10 | 14 | 27.3 | 1.55 | 1.28 | Acc |
| 11 | 15 | 27.5 | 1.58 | 1.05 | Acc |
| 12 | 14 | 28.0 | 1.55 | 1.12 | Acc |
| 13 | 15 | 27.0 | 1.73 | 1.09 | Acc |
| 14 | 14 | 27.2 | 1.60 | 1.21 | Acc |
| 15 | 14 | 27.4 | 1.55 | 1.32 | Acc |
| 16 | 14 | 28.1 | 1.52 | 1.20 | Acc |
| 17 | 14 | 27.4 | 1.55 | 1.17 | Acc |
| 18 | 14 | 27.0 | 1.56 | 1.16 | Acc |
| 19 | 13 | 27.7 | 1.54 | 1.05 | Acc |
| 20 | 13 | 28.1 | 1.53 | 1.15 | Acc |
| 21 | 13 | 27.4 | 1.56 | 1.09 | Acc |
| 22 | 13 | 27.9 | 1.53 | 1.06 | Acc |
| 23 | 13 | 27.4 | 1.55 | 1.01 | Acc |
| 24 | 13 | 27.6 | 1.61 | 1.11 | Acc |
| 25 | 13 | 27.9 | 1.60 | 1.23 | Acc |



VSWR (LNA)



NF & Gain (LNA)

| REV. NO. | DESCRIPTION | DATE | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|--|-----------|------------|----------------|--|------|--|------|----|-------|-------|-----------|-------|-------|----------------|--------|---------|-----------|--|-----------|--|----------|------|------------|----------|--|--|--|--|---------|
|  | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NO. | PARTS NAME | MATERIAL | FINISH | CODE NO. | <table border="1"> <tr> <td>NOTE</td> <td>TOL. UNLESS NOTED X = ±1 X.X = ±0.5 X.XX = ±0.2</td> <td>UNIT</td> <td>mm</td> <td>TITLE</td> </tr> <tr> <td>DRAWN</td> <td>M. Y. KIM</td> <td>SCALE</td> <td>1 / 1</td> <td>PCB-KANT-3200B</td> </tr> <tr> <td>DESIGN</td> <td>CHECKED</td> <td>FILE NAME</td> <td></td> <td>ORDER CO.</td> </tr> <tr> <td></td> <td>APPROVED</td> <td>DATE</td> <td>2005.08.27</td> <td>DWG. NO.</td> </tr> <tr> <td></td> <td></td> <td></td> <td></td> <td>BB-TOOL</td> </tr> </table> | NOTE | TOL. UNLESS NOTED X = ±1 X.X = ±0.5 X.XX = ±0.2 | UNIT | mm | TITLE | DRAWN | M. Y. KIM | SCALE | 1 / 1 | PCB-KANT-3200B | DESIGN | CHECKED | FILE NAME | | ORDER CO. | | APPROVED | DATE | 2005.08.27 | DWG. NO. | | | | | BB-TOOL |
| NOTE | TOL. UNLESS NOTED X = ±1 X.X = ±0.5 X.XX = ±0.2 | UNIT | mm | TITLE | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DRAWN | M. Y. KIM | SCALE | 1 / 1 | PCB-KANT-3200B | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DESIGN | CHECKED | FILE NAME | | ORDER CO. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | APPROVED | DATE | 2005.08.27 | DWG. NO. | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | BB-TOOL | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | | | | | <p style="text-align: right;">KNCTEK CO.,LTD</p> | | | | | | | | | | | | | | | | | | | | | | | | | |