

# SPECIFICATIONS

**PRODUCT NAME :** Wi-Fi Dual band ANT

**MODEL NAME :** TWFM-B001T

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|            |            |            |                             |         |
|------------|------------|------------|-----------------------------|---------|
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|            |            |            | DOCUMENT No.                | HC40645 |
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**SPECIFICATION**

REV.NO : 0.1


REV. DATE : 2010.10.26

MODEL NAME : **WiFi Dual band ANT**

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**Change History of Revision**

| Revision | Date       | Contents of Revision Change | Remark   |
|----------|------------|-----------------------------|----------|
| 0.1      | 2010.10.26 | Wi-Fi Dual band ANT Spec    | Y.H.Park |
|          |            |                             |          |
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## 1. ANT Features

- Dual band Wi-Fi ANT
- Main Frequency: 2.45GHz, 5.5GHz
- Frequency range
  - : From 2.40 to 2.50GHz, 5GHz~6GHz
- Operating temperature range
  - : -35 to +95°C (typ.)
- ANT Size (16.5x3.4x3.5mm)

## 2. Antenna Characteristics

| <b>Antenna Performance</b> |      |           |      |          |
|----------------------------|------|-----------|------|----------|
| Parameter                  | Min  | Typ       | Max  | Unit     |
| Frequency Range            | 2400 | 2450      | 2500 | MHz      |
|                            | 5000 | 5500      | 6000 | MHz      |
| Directivity                | -    | Omni      | -    | -        |
| Full band Average Gain     | -    | -2.51     | -    | dBi      |
| Full band Peak Gain        |      | +1.03     |      |          |
| V.S.W.R                    | -    | 2.5:1     | -    | Under    |
| Isolation                  |      | -15       |      | dB under |
| Impedance                  |      | 50        |      | Ohm      |
| Radiation Material         |      | Tin Plate |      |          |

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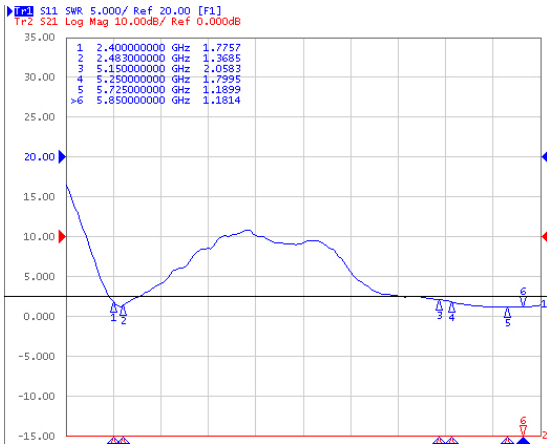
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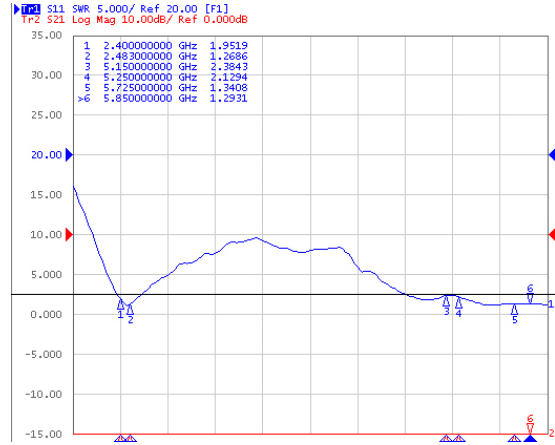
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## 2.1 Network Data

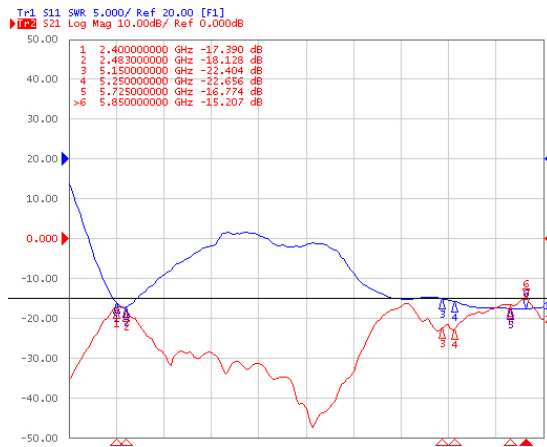
### VSWR\_L



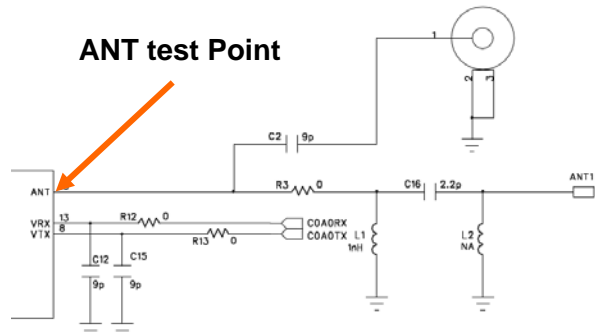
### VSWR\_R



### ANT Isolation



### ANT test Point





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## 2.2. Gain

### ANT\_L

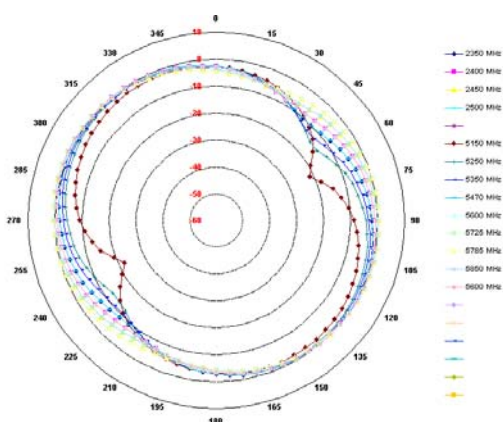
| Freq | Gavg  | Gpeak     | Gmin       |  |  |
|------|-------|-----------|------------|--|--|
| MHz  | dBi   | dBi deg   | dBi deg    |  |  |
| 2350 | -2.37 | 0.21 315  | -10.23 45  |  |  |
| 2400 | -2.03 | 0.43 305  | -8.32 40   |  |  |
| 2450 | -1.64 | 0.73 295  | -6.90 30   |  |  |
| 2500 | -1.28 | 0.99 285  | -5.90 20   |  |  |
| 5150 | -4.97 | -1.95 150 | -22.33 245 |  |  |
| 5250 | -3.54 | -0.80 140 | -14.62 50  |  |  |
| 5350 | -3.04 | -0.46 315 | -12.52 45  |  |  |
| 5470 | -2.38 | 0.16 310  | -10.23 45  |  |  |
| 5600 | -2.03 | 0.43 315  | -8.39 35   |  |  |
| 5725 | -1.64 | 0.73 295  | -6.90 30   |  |  |
| 5785 | -1.28 | 0.99 285  | -5.90 20   |  |  |
| 5850 | -1.62 | 0.72 285  | -6.901 30  |  |  |
| 5600 | -2.13 | 0.41 305  | -8.392 35  |  |  |

### ANT\_R

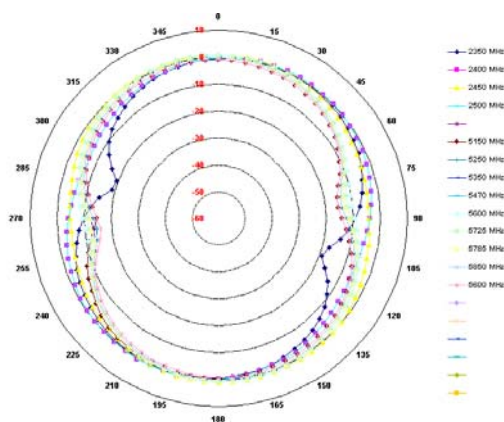
| Freq | Gavg  | Gpeak     | Gmin       |  |  |
|------|-------|-----------|------------|--|--|
| MHz  | dBi   | dBi deg   | dBi deg    |  |  |
| 2350 | -3.01 | 0.05 20   | -19.62 290 |  |  |
| 2400 | -1.75 | 0.48 30   | -7.02 295  |  |  |
| 2450 | -0.98 | 1.01 355  | -5.01 260  |  |  |
| 2500 | -1.75 | 0.45 30   | -6.89 295  |  |  |
| 5150 | -3.50 | -0.12 175 | -15.51 85  |  |  |
| 5250 | -2.99 | 0.56 175  | -14.50 265 |  |  |
| 5350 | -2.70 | 0.29 175  | -13.30 265 |  |  |
| 5470 | -2.30 | 0.62 175  | -12.03 260 |  |  |
| 5600 | -1.86 | 1.03 350  | -10.68 260 |  |  |
| 5725 | -2.32 | 0.64 175  | -11.53 260 |  |  |
| 5785 | -2.69 | 0.45 175  | -13.21 260 |  |  |
| 5850 | -3.03 | 0.00 175  | -14.4 265  |  |  |
| 5600 | -3.88 | -0.84 175 | -15.99 265 |  |  |

## 2.3. Radiation Pattern

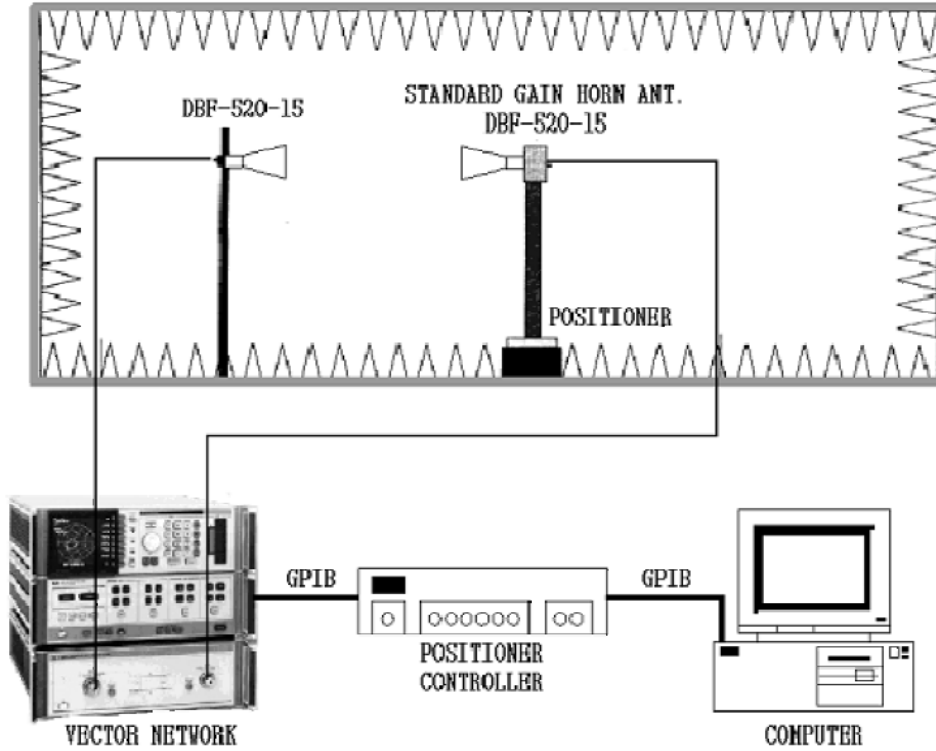
### ANT\_L



### ANT\_R



### 3. ANT Test Condition



### 4. ANT Dimensions

