

## antenna SPECIFICATION

Product description: 2.4G FPC Antenna

Model number: ANTENNA-2400

Issue Date: 2023-04-23

Note: 2400-2500MHz

Manufacturer: Shenzhen HamyWe Technology Co., Ltd.

Address: Room 308-316, Kaiyilian Building, No. 23, Liuxian 3rd Road,

Bao 'an District, Shenzhen

### 1、 (PRODUCT TECHNICAL SPECIFICATION)

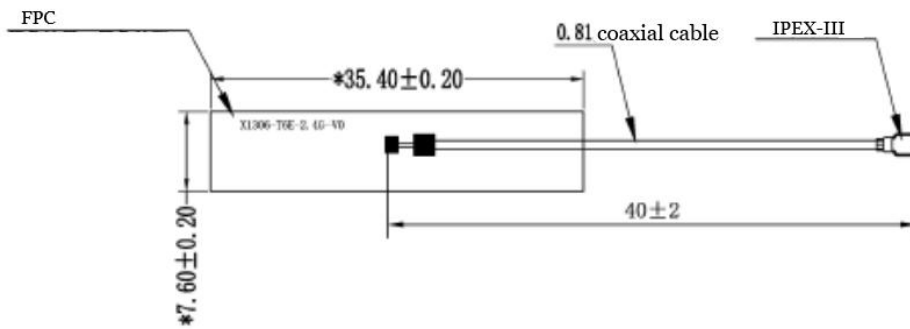
| Electrical Specifications    |            |
|------------------------------|------------|
| Frequency Range (MHz)        | 2400-2500  |
| Input Impedence ( $\Omega$ ) | 50         |
| V.S.W.R                      | $\leq 2.2$ |
| Gain (dBi)                   | 2          |
| Polarization Type            | Vertical   |
| Power Capacity (w)           | 50         |
| Mechanical Specifications    |            |
| Antenna Length (mm)          | 57mm       |
| Radiator                     | Cuprum     |

|                         |              |
|-------------------------|--------------|
| Connect Type            | IPEX-3       |
| Working Temp( °C)       | -10~40       |
| Storage Temperature(°C) | -40~85       |
| antenna size            | 35.4mmx7.6mm |
| Weight (g)              | 3            |

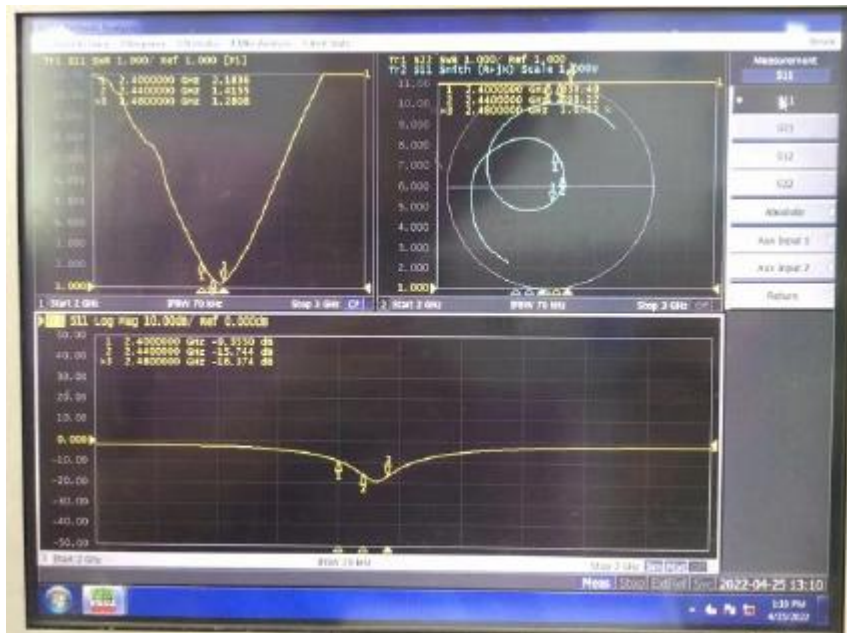
## 2、PRODUCT PICTURE



## 3、PRODUCT SPECIFICATION CHART

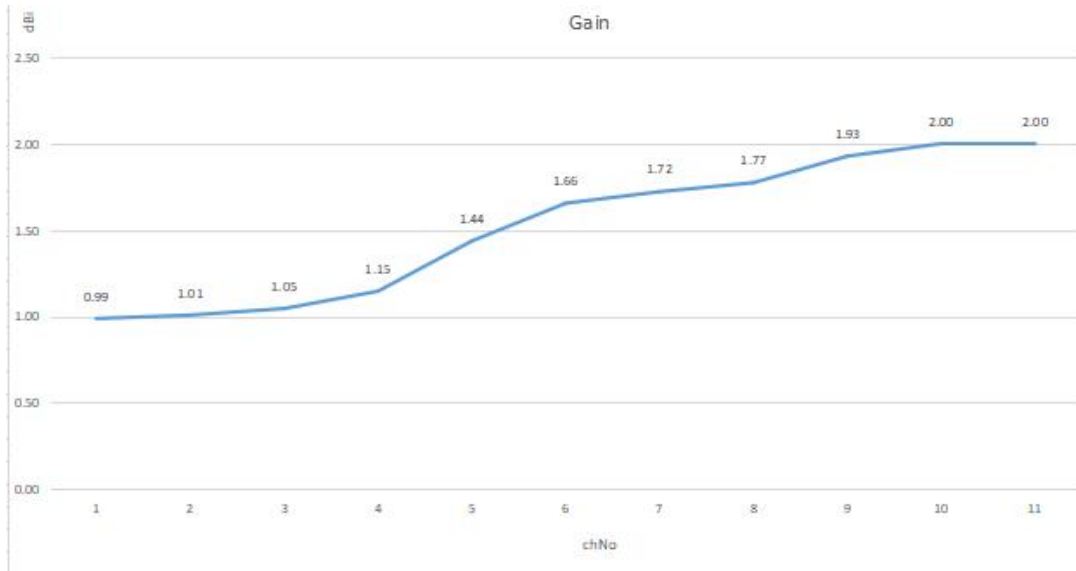


#### 4、Image of antenna field shape test



#### 5、Gain

|                           |        |        |        |        |        |        |        |        |        |        |        |
|---------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| <b>chNo</b>               | 1      | 2      | 3      | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     |
| <b>Freq(MHz)</b>          | 2400   | 2410   | 2420   | 2430   | 2440   | 2450   | 2460   | 2470   | 2480   | 2490   | 2500   |
| <b>Efficiency_dB</b>      | -3.43  | -3.44  | -3.38  | -3.21  | -3.05  | -2.82  | -2.69  | -2.55  | -2.47  | -2.38  | -2.39  |
| <b>Gain</b>               | 0.99   | 1.01   | 1.05   | 1.15   | 1.44   | 1.66   | 1.72   | 1.77   | 1.93   | 2.00   | 2.00   |
| <b>MinEIRP(dBm)</b>       | -17.34 | -17.13 | -17.58 | -17.54 | -17.45 | -16.55 | -16.02 | -15.58 | -14.44 | -14.66 | -14.46 |
| <b>BoreSightTheta(°)</b>  | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 120.00 | 150.00 |
| <b>BoreSightPhi(°)</b>    | 0.00   | 30.00  | 30.00  | 60.00  | 30.00  | 30.00  | 30.00  | 30.00  | 60.00  | 240.00 | 30.00  |
| <b>NHPRP 30(dBm)</b>      | -7.04  | -7.02  | -6.92  | -6.75  | -6.57  | -6.33  | -6.19  | -6.07  | -5.98  | -5.89  | -5.91  |
| <b>NHPRP 45(dBm)</b>      | -5.31  | -5.30  | -5.22  | -5.03  | -4.86  | -4.62  | -4.48  | -4.35  | -4.28  | -4.17  | -4.20  |
| <b>UHRP(dBm)</b>          | -7.80  | -7.82  | -7.78  | -7.56  | -7.38  | -7.12  | -6.95  | -6.78  | -6.69  | -6.60  | -6.60  |
| <b>LHRP(dBm)</b>          | -5.40  | -5.40  | -5.35  | -5.20  | -5.04  | -4.84  | -4.73  | -4.61  | -4.54  | -4.45  | -4.46  |
| <b>EIRP_X(dBm)</b>        | 0.59   | 0.67   | 0.71   | 0.84   | 1.11   | 1.37   | 1.42   | 1.47   | 1.54   | 1.61   | 1.74   |
| <b>Polarization_X</b>     | Theta  | Theta  | Theta  | Theta  | Theta  | Phi    | Phi    | Theta  | Theta  | Phi    | Theta  |
| <b>Theta_X(°)</b>         | 150.00 | 150.00 | 150.00 | 150.00 | 150.00 | 105.00 | 105.00 | 150.00 | 150.00 | 105.00 | 150.00 |
| <b>Phi_X(°)</b>           | 60.00  | 30.00  | 30.00  | 60.00  | 30.00  | 270.00 | 270.00 | 30.00  | 30.00  | 270.00 | 30.00  |
| <b>ThetaMax(°)</b>        | 0.59   | 0.67   | 0.71   | 0.84   | 1.11   | 1.31   | 1.41   | 1.47   | 1.54   | 1.60   | 1.74   |
| <b>PhiMax(°)</b>          | 0.55   | 0.53   | 0.66   | 0.80   | 1.09   | 1.37   | 1.42   | 1.43   | 1.52   | 1.61   | 1.56   |
| <b>ThetaMin(°)</b>        | -34.89 | -37.98 | -34.42 | -31.16 | -28.40 | -27.28 | -27.15 | -31.55 | -37.06 | -48.14 | -45.25 |
| <b>PhiMin(°)</b>          | -31.02 | -30.43 | -31.27 | -43.54 | -40.95 | -38.52 | -32.32 | -31.55 | -37.06 | -48.14 | -45.25 |
| <b>Directivity(dB)</b>    | 4.41   | 4.44   | 4.43   | 4.36   | 4.48   | 4.48   | 4.41   | 4.33   | 4.40   | 4.43   | 4.45   |
| <b>UHRP/TRP Ratio(dB)</b> | -4.37  | -4.38  | -4.40  | -4.35  | -4.33  | -4.30  | -4.26  | -4.23  | -4.22  | -4.22  | -4.21  |
| <b>UHRP/TRP Ratio(%)</b>  | 36.56  | 36.44  | 36.34  | 36.71  | 36.86  | 37.12  | 37.52  | 37.76  | 37.86  | 37.87  | 37.92  |
| <b>Efficiency_Pcent</b>   | 45.45  | 45.33  | 45.87  | 47.74  | 49.58  | 52.23  | 53.85  | 55.56  | 56.56  | 57.83  | 57.70  |
| <b>UHEfficiency_dB</b>    | -7.80  | -7.82  | -7.78  | -7.56  | -7.38  | -7.12  | -6.95  | -6.78  | -6.69  | -6.60  | -6.60  |
| <b>UHEfficiency_Pcent</b> | 16.61  | 16.52  | 16.67  | 17.52  | 18.27  | 19.39  | 20.20  | 20.98  | 21.41  | 21.90  | 21.88  |
| <b>OOB</b>                | 14.40  | 14.15  | 13.80  | 13.11  | 13.57  | 13.59  | 13.93  | 14.00  | 14.07  | 14.21  | 13.75  |



## 6、3D Radiation Pattern

