

# WA-F-R3-02-001 Specification

## 1. Explanation of part number :

WA - F - R3 - 02 - 001  
(1) (2) (3) (4) (5)

(1) Product Type : Wireless Antenna

(2) Material: FPCB+CABLE

(3) Frequency : 868MHz-915MHz

(4) Coaxial Cable Type : 02

(5) Suffix :001

## 2. Storage Condition:

Temperature -40 to +70 °C  
Humidity 65±20 % RH

## 3. Operating Condition:

Temperature -40 to +70 °C  
Humidity 65±20 % RH

## 4. Electrical Specification :

Those specifications were specially defined for 佳德 GC NEXT SubG900-Main model, and all characteristics were measured under the model's handset testing jig .

### 4-1. Frequency Band:

Frequency Band	MHz
SubG900-Main	868MHz-915MHz

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=± X.X=± X.XX=±

ANGLES=± HOLEDIA=±

SCALE : UNIT : mm

DRAWN BY : 靳静 CHECKED BY : 赵付辉

DESIGNED BY : 余晓晖 APPROVED BY : 赵付辉

TITLE : WA-F-R3-02-001 Specification



佳邦科技股份有限公司  
INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT NO.

PAGE REV.  
P2

## 4-2. Impedance

50 ohm nominal

## 4-3. Matching circuit

None

## 4-4. VSWR

### 4-4.1 Measuring Method

1. A 50Ω coaxial cable is connected to the antenna. Then this cable is connected to a network analyzer to measure the VSWR
2. Keeping this jig away from metal at least 20cm

### 4-4.2 Measurement frequency points and VSWR value

Frequency (Unit MHz)	868	915
VSWR	≤3.0	≤3.0
VSWR	1.96	1.43



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±          X.X=±      X.XX=±

ANGLES=±      HOLEDIA=±

SCALE :                      UNIT : mm

DRAWN BY : 靳静              CHECKED BY : 赵付辉

DESIGNED BY : 余晓晖        APPROVED BY : 赵付辉

TITLE : WA-F-R3-02-001 Specification



佳邦科技股份有限公司  
INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT  
NO.

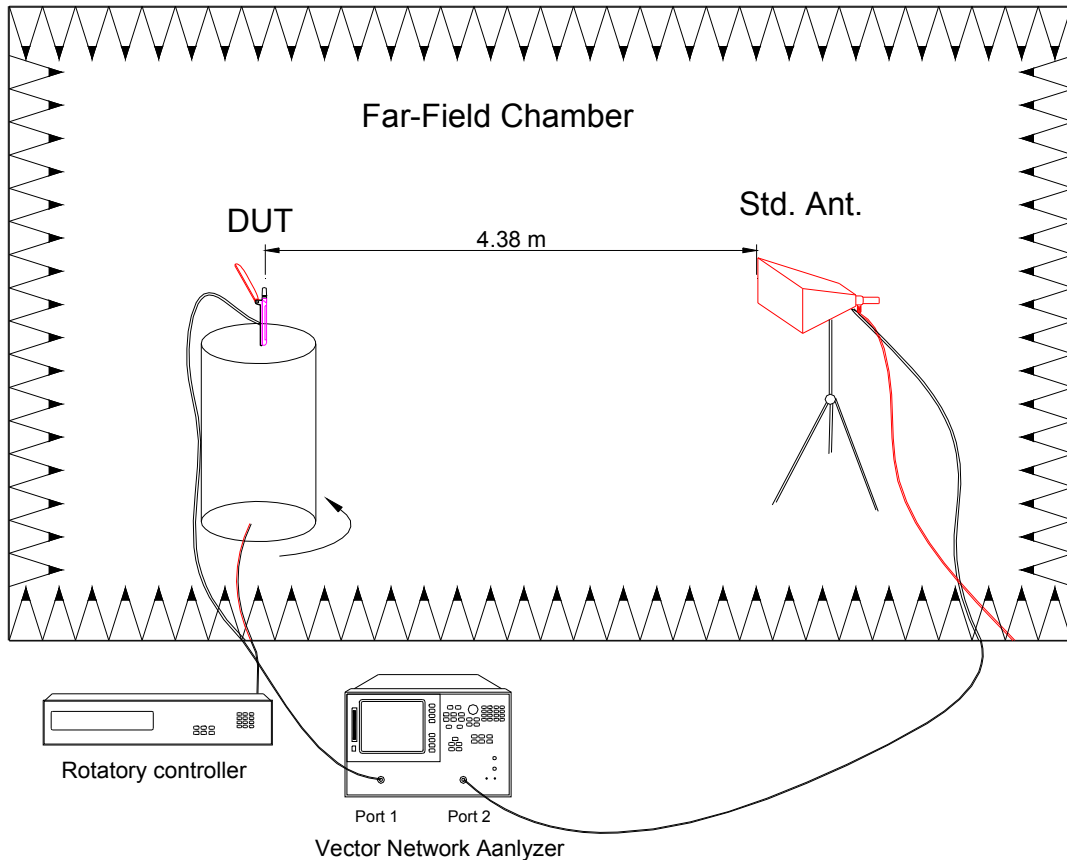
PAGE REV.  
P2

## 4-5. Efficiency and Gain

### 4-5.1 Measure method

1. Using a low loss coaxial cable to link a standard handset jig
2. Fixed this handset jig on chamber's rotator plane
3. Linking jig into network analyzer port and using a probing horn antenna to collect data.
4. Using another standard gain horn antenna to calibrated those data

### 4-5.2 Chamber definition



1. An anechoic chamber (7mx4mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 40cmx40cmx40cm at the center of rotator
3. The distance between DUT and standard antenna is 4.38 m
4. Probing antenna (9120D horn antenna) and standard gain horn antenna (BBHA9120 LPF 700MHz ~6GHz)

UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±      X.X=±      X.XX=±

ANGLES=±      HOLEDIA=±

SCALE :      UNIT : mm

DRAWN BY : 靳静      CHECKED BY : 赵付辉

DESIGNED BY : 余晓晖      APPROVED BY : 赵付辉

TITLE : WA-F-R3-02-001 Specification



佳邦科技股份有限公司  
INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT  
NO.

PAGE REV.  
P2

### 4-5.3 Efficiency and Gain

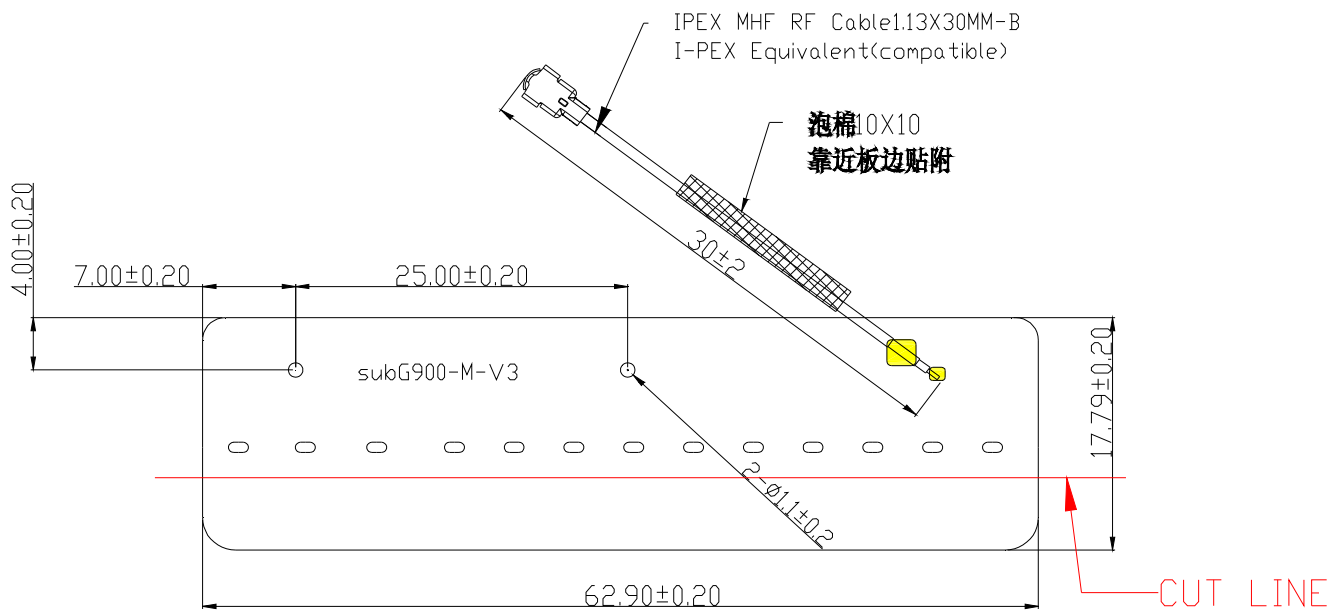
Antenna gain is marked (dBi) and is based on STANDARD HORN antenna. The data shows Peak Gain and Average Gain.

Frequency (MHz)	868	915
Efficiency (%)	34.51	41.11
Gain (dBi)	0.57	1.35

## 5. Mechanical Specification:

### 5-1. Mechanical Configuration (Unit: mm)

The appearance of the antenna is according to drawing Figure 5-1-1



UNLESS OTHER SPECIFIED TOLERANCES ON :

X=±      X.X=±      X.XX=±

ANGLES=±      HOLEDIA=±

SCALE :      UNIT : mm

DRAWN BY : 靳静      CHECKED BY : 赵付辉

DESIGNED BY : 余晓晖      APPROVED BY : 赵付辉

TITLE : WA-F-R3-02-001 Specification



佳邦科技股份有限公司  
INPAQ TECHNOLOGY CO., LTD.

THIS DRAWINGS AND SPECIFICATIONS ARE THE PROPERTY OF INPAQ TECHNOLOGY CO.,LTD.AND SHALL NOT BE REPRODUCED OR USED AS THE BASIS FOR THE MANUFACTURE OR SALE OF APPARATUS OR DEVICES WITHOUT PERMISSION

DOCUMENT  
NO.

PAGE REV.  
P2