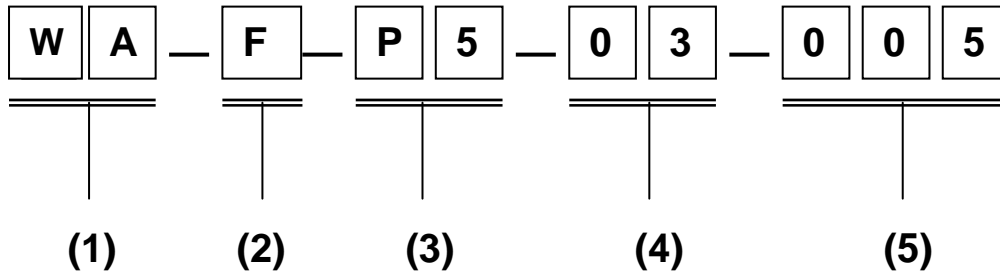


Penta-Band Antenna for WA-F-P5-03-005

1. Explanation of part number:



- (1) Product type: Wireless Antenna
- (2) Material: FPCB
- (3) Frequency: 850, 900, 1800, 1900, 2100 bands
- (4) Coaxial Cable Type: I-PEX, phi1.13mm, 100mm, Color Gray
- (5) Suffix : 005

2. Electrical Specification:

Those specifications were specially defined for **3G antenna**.

2-1. Frequency Band:

Frequency Band	MHz
850	824~894
900	880~960
1800	1710~1880
1900	1850~1990
2100	1920~2170

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± X.X = ± X.XX =
 ANGLES = ± HOLE DIA = ±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 張嘉穗 *Apr 11*

CHECKED BY: 楊奇峰 *Kenny*

DESIGNED BY: 蘇港雄 *KH*

APPROVED BY: 陳智嵐 *Chen*

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TITLE : Penta-Band Antenna for WA-F-P5-03-005

DOCUMENT NO.

ENS000035660

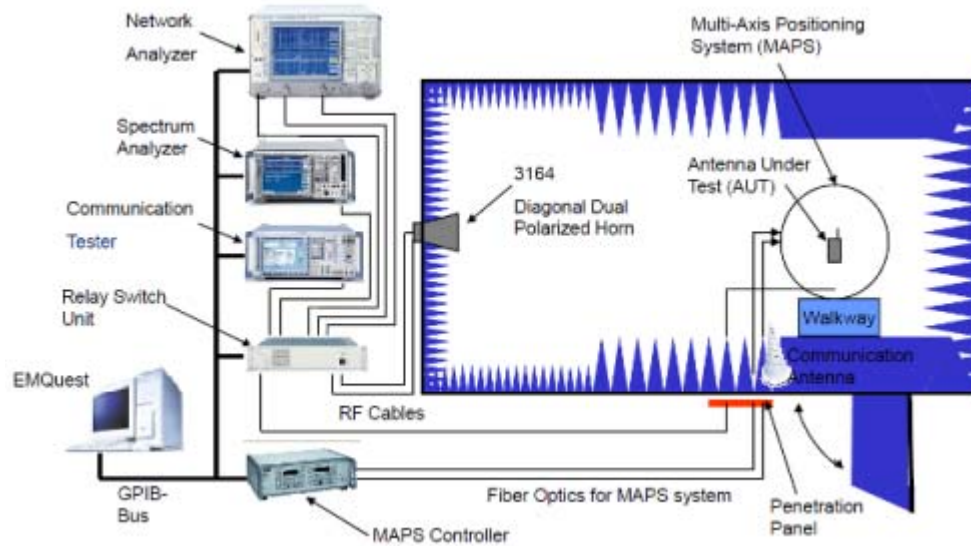
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2-2 Gain and Radiation Pattern

2-2.1 Measure method

1. Using a low loss coaxial cable to link 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

2-2.2 Chamber definition



1. An anechoic chamber (10mx3mx3m) which satisfied far-field condition was applied to avoid multi-path effect
2. The quiet room region is 50cmx50cmx50cm at the center of rotator
3. The distance between DUT and standard antenna is 9.14m
4. Two measurement antennas is 3164-06 (300MHz - 6GHz) and 3164-05 (2 - 18GHz)

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± X.X = ± X.XX =
 ANGLES = ± HOLE DIA = ±



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SCALE : N/A

UNIT : mm

DRAWN BY : 張嘉穗 *April*

CHECKED BY: 楊奇峰 *Kenny*

DESIGNED BY: 蘇港雄 *KH*

APPROVED BY: 陳智嵐 *John*

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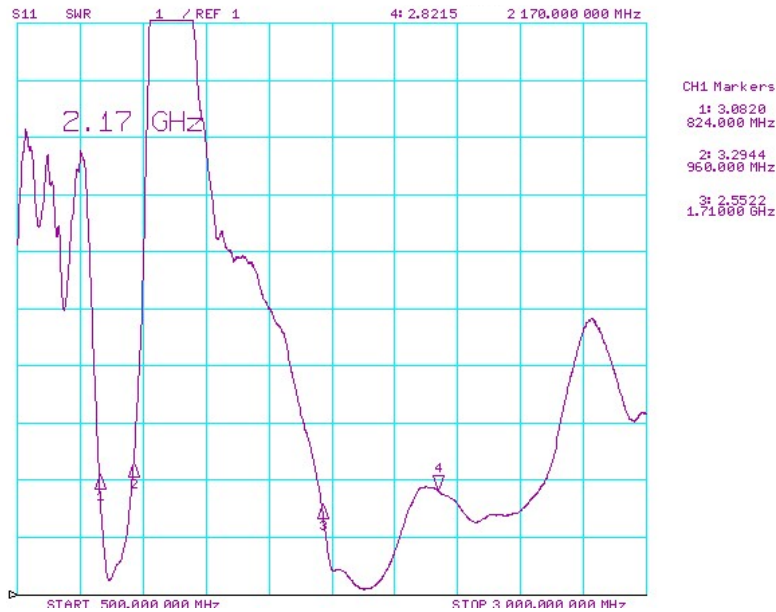
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NO.

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2-3 VSWR:



Frequency (Unit MHz)	824	960	1710	2170
VSWR	3.08	3.29	2.55	2.82

2-4 3D Gain data and radiation pattern

Antenna gain is marked [dBi] and is based on STANDARD HORN antenna. The data shows Peak-Gain and Average-Gain.

Freq. [unit:MHz]	3D Gain Data		
	Gain [dBi]		Efficiency (%)
	Peak	Average	
824	-0.67	-5.18	30.32
960	-0.45	-5.04	31.30
1710	-0.12	-2.90	51.25
2170	1.83	-2.92	50.95

UNLESS OTHER SPECIFIED TOLERANCES ON :
 $X = \pm$ $X.X = \pm$ $X.XX =$
ANGLES = \pm **HOLE DIA = \pm**



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 張嘉穗 *April*

CHECKED BY: 楊奇峰 *Kenny*

DESIGNED BY: 蘇港雄 *KH*

APPROVED BY: 陳智嵐 *ZW*

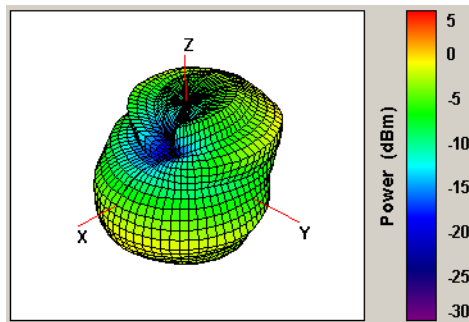
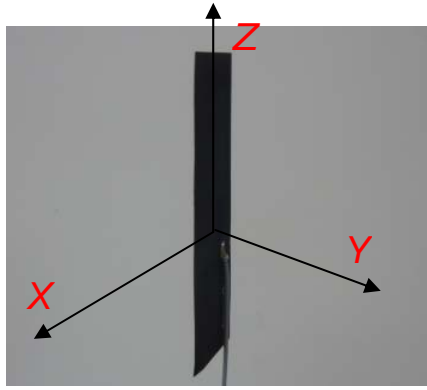
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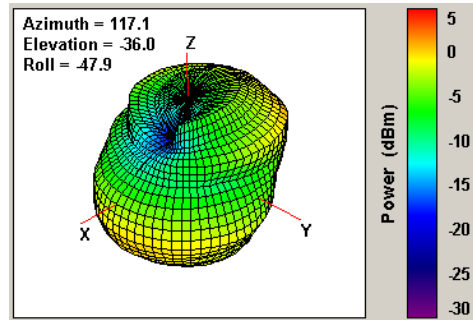
DOCUMENT NO.

ENS000035660

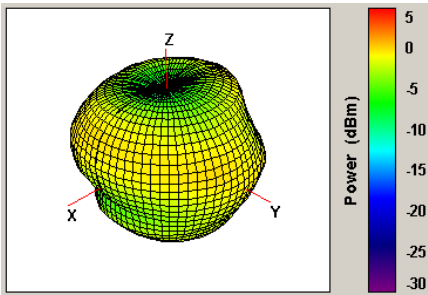
SPEC REV.
A0



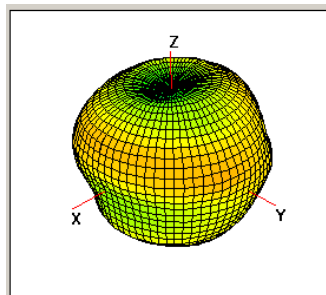
850 MHz



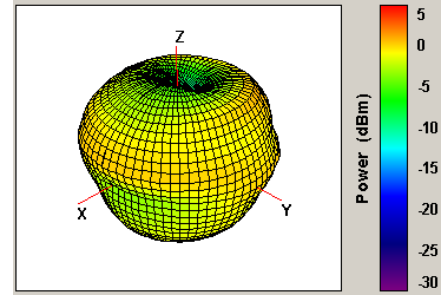
900 MHz



1800 MHz



1900 MHz



2100 MHz

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± X.X = ± X.XX =
 ANGLES = ± HOLE DIA = ±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 張嘉穗 *April*

CHECKED BY: 楊奇峰 *Kenny*

DESIGNED BY: 蘇港雄 *KH*

APPROVED BY: 陳智嵐 *Alan*

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3. Mechanical Specification:

3-1. Mechanical Configuration:

The appearance of the antenna is according to drawing Figure 3-1-1.

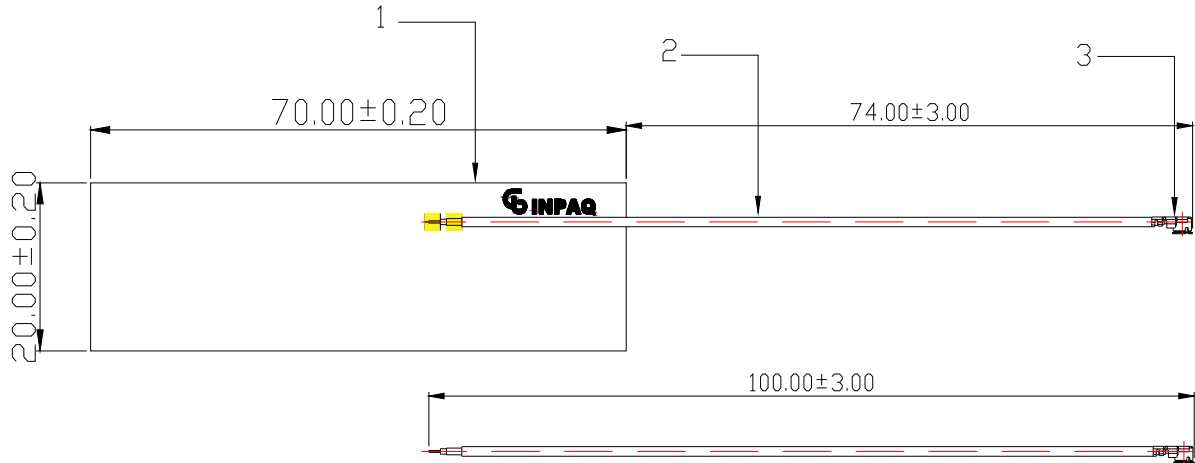


Figure 3-1-1 The antenna drawing

ITEM	DESCRIPTION	MATERIAL SPECIFICATION	QUANTITY	UNIT
1	FPCB	70mm x 20mm	1	PCS
2	Cable	phi 1.13mm, 100mm, Color Gray	1	PCS
3	Connector	I-PEX	1	PCS

UNLESS OTHER SPECIFIED TOLERANCES ON :

X = ± X.X = ± X.XX =
 ANGLES = ± HOLE DIA = ±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

DRAWN BY : 張嘉穗 *April*

CHECKED BY : 楊奇峰 *Kenny*

DESIGNED BY : 蘇港雄 *KH*

APPROVED BY : 陳智崑 *ZW*

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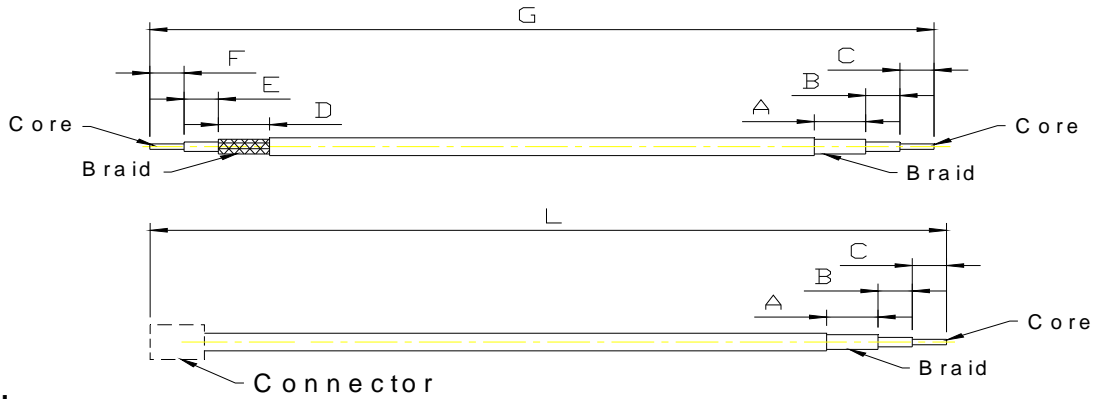
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SPEC REV.

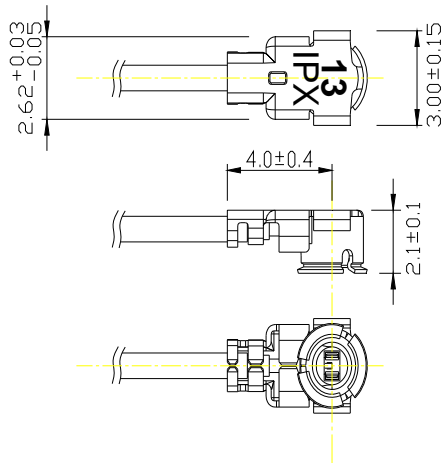
A0

3-2. Cable & Connector Appearance:



Connector : I-PEX MHF , Cable : RF Cable 1.13 (Gray) ,

- L : 100±3.0mm D : 0.84±0.2mm
- A : 2±0.5mm E : 1.25±0.2mm
- B : 1±0.5mm F : 1.16±0.2mm
- C : 1±0.5mm G : 98.7±1.5mm



UNLESS OTHER SPECIFIED TOLERANCES ON :
 X = ± X.X = ± X.XX =
 ANGLES = ± HOLE DIA = ±



INPAQ TECHNOLOGY CO., LTD.

SCALE : N/A

UNIT : mm

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