

## Antenna specification of "Bluetooth", "WiFi"

CONFIDENTIAL

2013/4/15  
Mitsubishi Electric Corp.  
Sanda Works

### ■Specification

Model name ANT1466-161CB/U-BT (NISSEI)  
ANT1467-161CW/U-WiFi (NISSEI)

- Resonant frequency : 2450MHz
- Antenna gain : 2.0dBi (max)
- Band frequency(VSWR $\leq$ 3) : 2400~2500MHz (bandwidth:100MHz)

### ■Outline view



[Antenna Outline]

**Bluetooth**

Side View

LotNo. Laser Marking

LotNo. Display method  
 1: Year of manufacture: Last digit of calendar year  
 2: Month of manufacture: 1~9, A, B, C  
 3 4: Day of manufacture: 01~31

Top View

Side View

4	CONNECTOR	1	U.FL-LP-066	---	HIROSE ELECTRIC CO., LTD.
-	SOLDER BAR	-	ESC SOLDER BAR W705	Lead-Free Solder	SENDA METAL INDUSTRY CO., LTD.
-	SOLDER	-	SPARKLE ESC F3 W705 0.5	Lead-Free Solder	SENDA METAL INDUSTRY CO., LTD.
-	SOLDER	-	SPARKLE ESC F3 W705 0.3	Lead-Free Solder	SENDA METAL INDUSTRY CO., LTD.
3	ABS	1	ANTP004-P010-ABS	TM-25 BLACK	BROOK CO., LTD.
2	SHEET METAL	1	ANTP004-P003-METAL	Nickel Silver C7701-1/2H (D.42)	NISSSEI ELECTRIC CO., LTD.
1	CABLE	1	RF-W-SYNTHETIC BLACK	---	NISSSEI ELECTRIC CO., LTD.
LTR	PART NAME	QTY	PART NAME	MATERIAL/REMARK	MAKER

**WiFi**

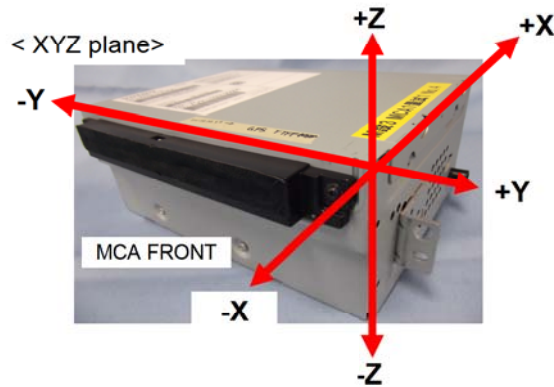
Side View

Top View

Side View

4	CONNECTOR	1	U.FL-LP-066	---	HIROSE ELECTRIC CO., LTD.
-	SOLDER BAR	-	ESC SOLDER BAR W705	Lead-Free Solder	SENDA METAL INDUSTRY CO., LTD.
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2	SHEET METAL	1	ANTP004-P003-METAL	Nickel Silver C7701-1/2H (D.42)	NISSSEI ELECTRIC CO., LTD.
1	CABLE	1	RF-W-SYNTHETIC WHITE	---	NISSSEI ELECTRIC CO., LTD.
LTR	PART NAME	QTY	PART NAME	MATERIAL/REMARK	MAKER

■Average power gain and emission pattern in 2450MHz

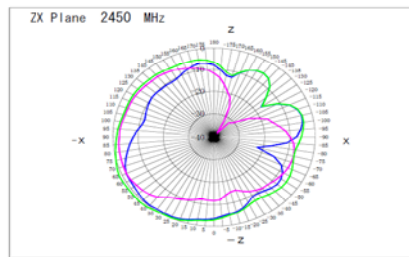
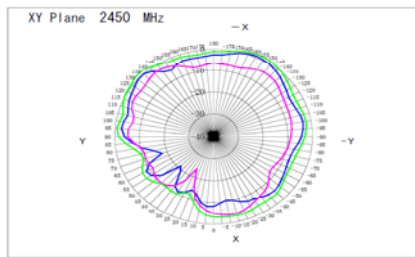


**Bluetooth Antenna**

Emission characteristic

Measured frequency 2450MHz  
YZ plane and ZX plane combination -2.7dBi

Frequency [MHz]	Plane	Polarized wave	Peak [dBi]	360° Avg. [dBi]	360° True value	Sum of True value	Combination [dBi]	DIP [dBi]	DIP-AVE [dB]
2450	XY	XY (H)	0.77	-4.25	0.38	0.59	-2.27	-12.35	9.37
		XY (V)	-2.56	-6.64	0.22				
	ZX	XY (H)	-0.40	-5.63	0.27	0.47	-3.26	-16.83	13.85
		XY (V)	-1.76	-7.02	0.20				



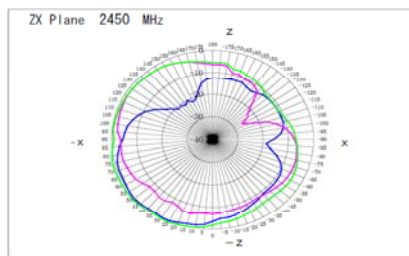
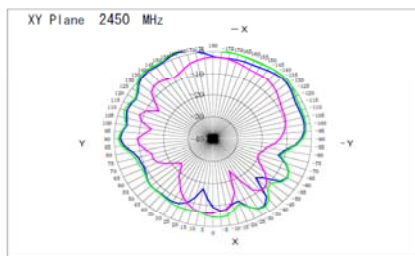
H [dBi]  
V [dBi]  
H+V [dBi]

**WiFi Antenna**

Emission characteristic

Measured frequency 2450MHz  
YZ plane and ZX plane combination -2.2dBi

Frequency [MHz]	Plane	Polarized wave	Peak [dBi]	360° Avg. [dBi]	360° True value	Sum of True value	Combination [dBi]	DIP [dBi]	DIP-AVE [dB]
2450	XY	XY (H)	2.13	-3.33	0.46	0.62	-2.09	-11.68	9.41
		XY (V)	-2.46	-8.13	0.15				
	ZX	XY (H)	0.63	-5.41	0.29	0.58	-2.40	-11.17	8.89
		XY (V)	-1.15	-5.42	0.29				



H [dBi]  
V [dBi]  
H+V [dBi]