

SPECIFICATION FOR APPROVAL

CUSTOMER

DESCRIPTION

433/868MHz Screw type PUCK antenna (IP67 Waterproof)

PART NO.

SW-DI-04A

DATE

DESIGNER		DIRECTOR	
----------	--	----------	--

Approved by Customer/date:



Tekfun Co., Ltd.

ANTENNA SPECIFICATIONS FOR APPROVAL

1 GENERAL DESCRIPTION

- 1.1 Type No. : SW-DI-04A
1.2 Customer P/N :

2 DESCRIPTION & APPLICATION

This antenna assembly is designed for use in 433mhz and 868mhz

3 ELECTRICAL CHARACTERISTICS

3.1 Antenna type:	Roof Screw Mount PUCK Antenna
3.2 Frequency Rang:	433/868mhz
3.3 V.S.W.R:	< 2.0
3.4 Impedance:	50 OHM
3.5 Gain:	0 dBi
3.6 Connector:	SMA male, FME Female...etc
3.7 Cable	RG174 1.5m, 2m or 3m
3.7 Color:	Black

4 ENVIRONMENTAL CHARACTERISTICS

- 4.1 Operating temperature range -40°C to + 70°C

5 QUALIFICATION TESTING

- 5.1 All products shall be able to withstand the following testing.
5.2 Physical dimensions identified within this specification.

6 PACKING STYLE

- 6.1 Packing: Poly Bag.



Tekfun Co., Ltd.

ANTENNA SPECIFICATIONS FOR APPROVAL

7 APPEARANCE :

ANTENNA HOUSING MEETS TO IP67 WATERPROOF RATING



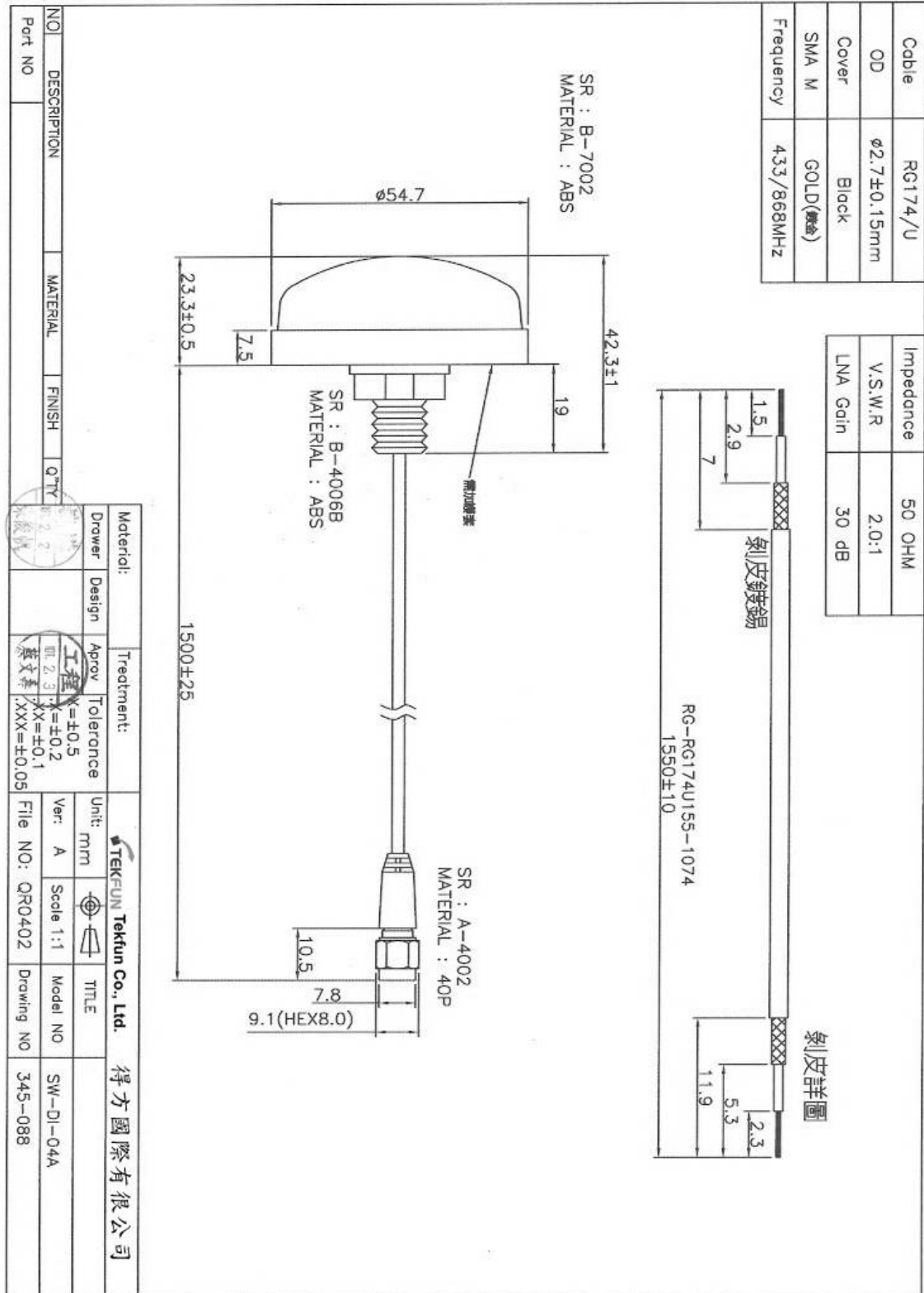


TEKFUN

Tekfun Co., Ltd.

ANTENNA SPECIFICATIONS FOR APPROVAL

8 DRAWING, DIMENSION

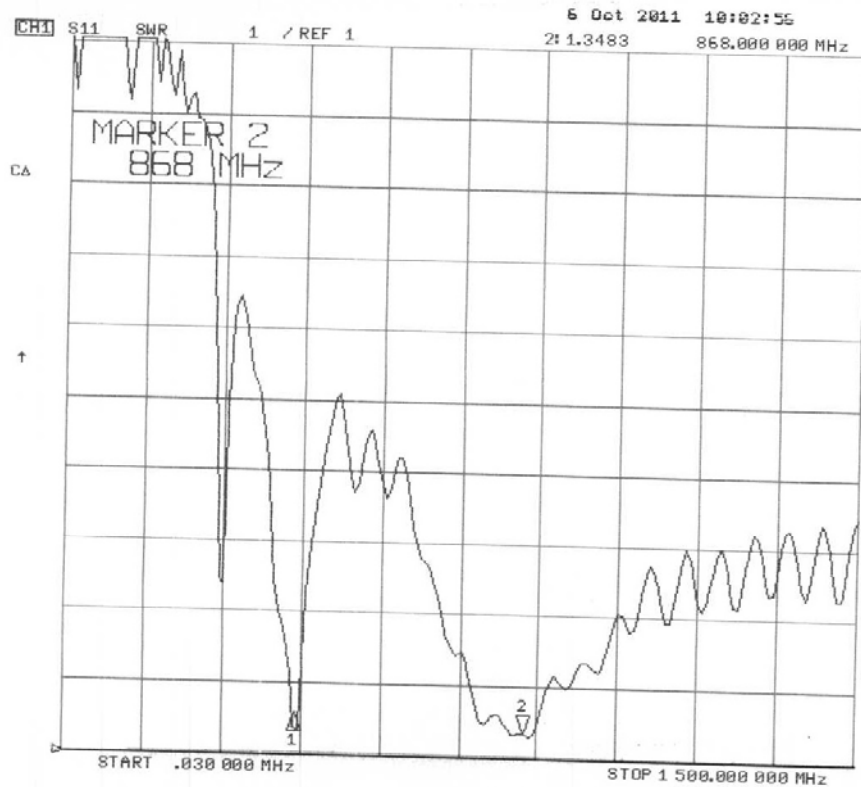




Tekfun Co., Ltd.

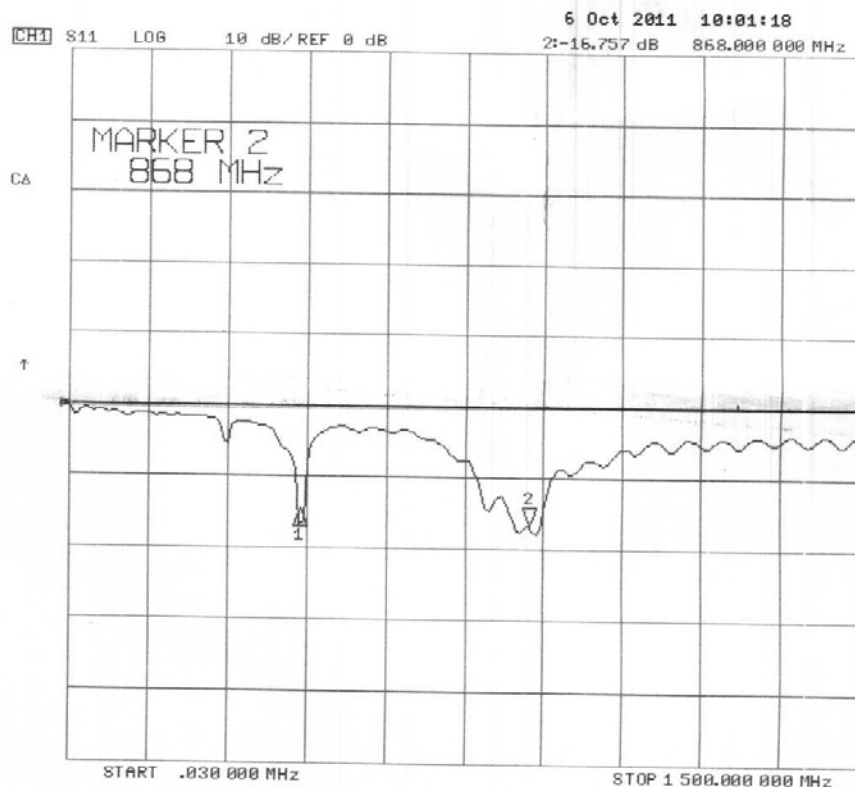
ANTENNA SPECIFICATIONS FOR APPROVAL

9 TEST VSWR



CH1 Markers
1: 1.5505
433.000 MHz

GSM-04A
for 433+868MHz
dual band
1.5metres RG174
+ SMA(M)



CH1 Markers
1: -14.677 dB
433.000 MHz

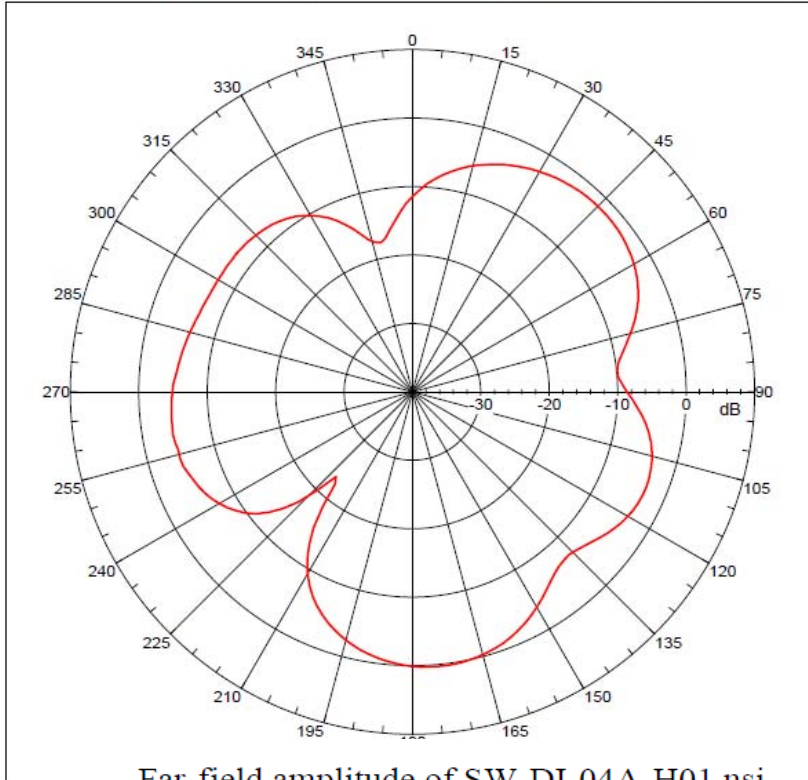


Tekfun Co., Ltd.

ANTENNA SPECIFICATIONS FOR APPROVAL

10 PATTERN

Far-field amplitude of SW-DI-04A 868-E01.nsi



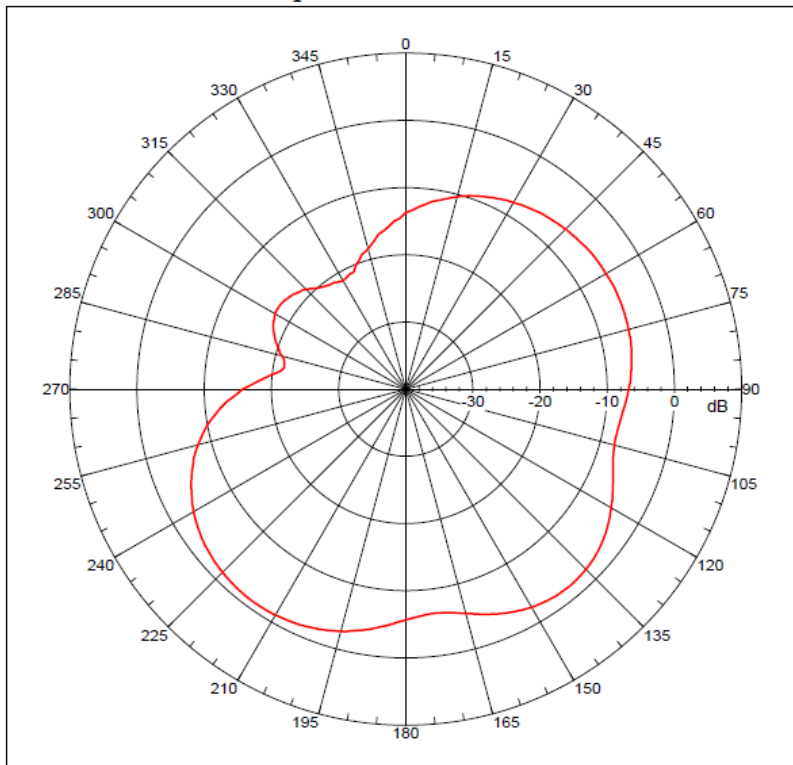
Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = 0.26754 dBi
 Max far-field (global) = -40.51956 dB, Max far-field (plot) = -40.51961 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: 174.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\20
 Measurement date/time: 5/27/2014 11:21:26 AM, Filetype: NSI-97
 Far-field Cut Analysis:
 Avg value: -5.441 dB
 -3. dB beam width: Not Found
 -6. dB beam width: Not Found
 -10. dB beam width: Not Found
 Left Sidelobe: -3.37 dB at 113.631 deg
 Right Sidelobe: Not Found
 Far-field display setup:
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 1
 Beam Frequency Azimuth Elevation Pol

 1 0.868 GHz Azimuth Elevation Single-pol

Far-field amplitude of SW-DI-04A-H01.nsi



Far-field amplitude, Eprincipal: Linear, Tau = 0.000 deg
 Gain = -1.07087 dBi
 Max far-field (global) = -41.85797 dB, Max far-field (plot) = -41.858 dB
 Normalization: Reference, Network offset = 0.000 dB
 Hpeak at: -144.000 deg, Vpeak at: 0.000 deg
 Plot centering: On

NSI2000 V4.0.124, Filename: C:\Documents and Settings\NSI\Desktop\20
 Measurement date/time: 5/27/2014 11:23:10 AM, Filetype: NSI-97
 Far-field Cut Analysis:
 Avg value: -7.032 dB
 -3. dB beam width: 54.86 deg
 -6. dB beam width: Not Found
 -10. dB beam width: Not Found
 Left Sidelobe: Not Found
 Right Sidelobe: -16.43 dB at -57.318 deg
 Far-field display setup:
 Azimuth (deg)
 Span = 360.00001 deg, Center = 0.000 deg, #pts = 181
 Start = -180.00001 deg, Stop = 180.00001 deg, Delta = 2.000 deg
 Elevation (deg)
 Center = 0.000 deg, #pts = 1

Selected beam(s) 1 of 1
 Beam Frequency Azimuth Elevation Pol

 1 0.868 GHz Azimuth Elevation Single-pol