

## 適用

本仕様書は株式会社 IDY (以下、IDY) が DS2600-0201BSM に追加する仕様であり、IDY が供給する

DS2600-0201BSM-I

にのみ適用される。

IDY が供給する本仕様に準拠したアンテナは Wimax/Wimax2+通信モジュールに接続するものである。

## 1. 仕様

形名 DS2600-0201BSM-I

※その他仕様は DS2600-0201BSM に準拠

## 2. 特性と信頼性試験

- ・ DS2600-0201BSM に準拠

## 3. 外観仕様

- ・ DS2600-0201BSM に準拠

## 4. シール仕様

- ・ 形名、ロットについては DS2600-0201BSM に準拠
- ・ IDY 供給品については下記のシールをアンテナ本体またはビニール袋に貼付

サイズ: 25mm × 7mm



## ○ お問い合わせ



株式会社IDY

〒101-0043

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TEL: 03-3527-1740 FAX: 03-3527-1741

**Product Number: DS2600-0201BSM**

**Product Name: Antenna**

**% Specification**

<b>Sample Photo</b>	
	
<b>A. Electrical Characteristics</b>	
<b>Frequency</b>	<b>2500 ~ 2700 MHz</b>
<b>S.W.R.</b>	<b>&lt;= 2.0</b>
<b>Peak Gain</b>	<b>&lt;= 3.0 dBi</b>
<b>Efficiency</b>	<b>60%</b>
<b>Polarization</b>	<b>Linear</b>
<b>Impedance</b>	<b>50 Ohm</b>
<b>B. Material &amp; Mechanical Characteristics</b>	
<b>Material of Radiator</b>	<b>CU</b>
<b>Material of Plastic</b>	<b>Glass Fiber</b>
<b>Cable Type</b>	<b>LMR200</b>
<b>Connector Type</b>	<b>SMA Male</b>
<b>C. Environmental</b>	
<b>Operation Temperature</b>	<b>- 40 °C ~ + 65 °C</b>
<b>Storage Temperature</b>	<b>- 40 °C ~ + 80 °C</b>

Product Number: DS2600-0201BSM

Product Name: Antenna

## & Characteristics and Reliability Test

Test Items		Test Condition and Procedure	Requirements
C1	S.W.R.	Set DUT on Network Analyzer; make individual calibration to test	Directive DUT specification
C2	Antenna Gain	Set DUT on Antenna Chamber; make individual calibration to test	Directive DUT specification
M1	Vibration	GB / T2423 . 48-1997 Amplitude: 0.03 inch (1.5mm); Freq: 20 to 80 to 20 Hz 3 directions; 2 hours for each direction	1. No Visual Damage 2. Frequency Tol.<= 5%
M2	Random Drop	GB / T2423.8-1995 Height: 1.0 Meter; 3 directions; 1 time for each direction	1. No parts separated 2. Frequency Tol.<= 5%
M3	Solderability	GB 2423 . 28- 82 Solder iron: 260±5°C; Duration: 5 seconds	1. Mounted on PCB 2. No Visual Damage
M4	Terminal-Pull Test	Holding with individual specification; force applied to axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M5	Terminal-Torque Test	Holding with individual specification; applied clockwise and counterclockwise to the axis of terminal	1. Directive DUT specification 2. Frequency Tol.<= 5%
M6	Dimension	Inspection of dimension, color, material, package, surface process	Directive DUT specification
E1	Salt Spray	GB / T 2423 . 17- 93 Temp: 35°C; RH: >= 95%; NaCl solution: >= 5%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E2	Humidity	GB / T 2423 . 4 - 93 Temp: 80°C / 12 H; -40°C / 12H RH: >= 90%; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E3	Thermal Shock	GB / T 2423 . 22 - 87 1 Cycle: - 40°C (30 minutes) to + 80°C (30 minutes) Cycles: 24	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
E4	Life (High Temp.)	GB /T 2423 . 2 - 89 Temp: 80°C; Time: 24 hours	After 2 Hours Recovery 1. No Visual Damage 2. Frequency Tol.<= 5%
R1	RoHS	With Reference to IEC 62321:2008 with flow chart	Directive RoHS 2002/95/EC
R2	PFOS	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC
R3	PFOA	With Reference to USA EPA 3540C:1996 by LC/MS	Directive RoHS 2006/122/EC

Product Number: DS2600-0201BSM

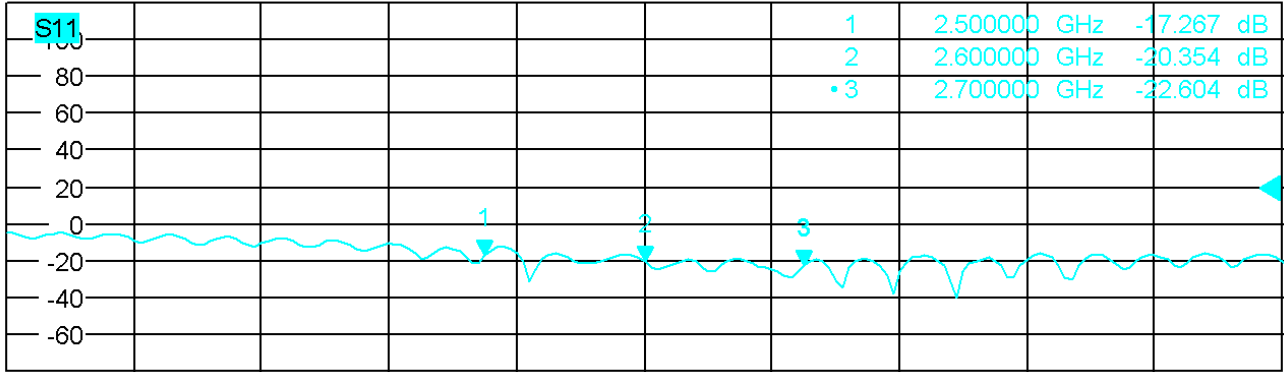
Product Name: Antenna

### Antenna - S Parameter Test Data



Trc10 S11 dB Mag 20 dB/ Ref 20 dB

1



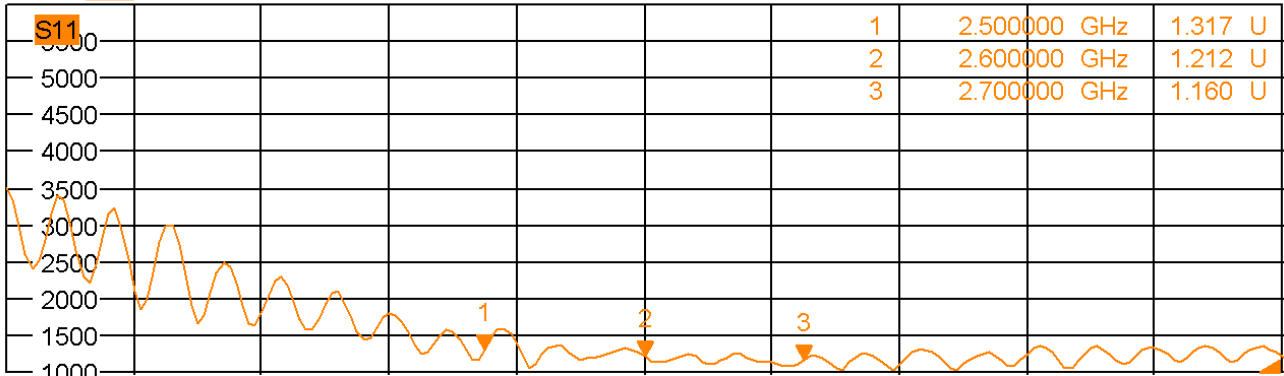
Ch1 Start 2.2 GHz

Pwr -10 dBm

Stop 3 GHz

Trc11 S11 SWR 500 mU/ Ref 1 U

2



Ch1 Start 2.2 GHz

Pwr -10 dBm

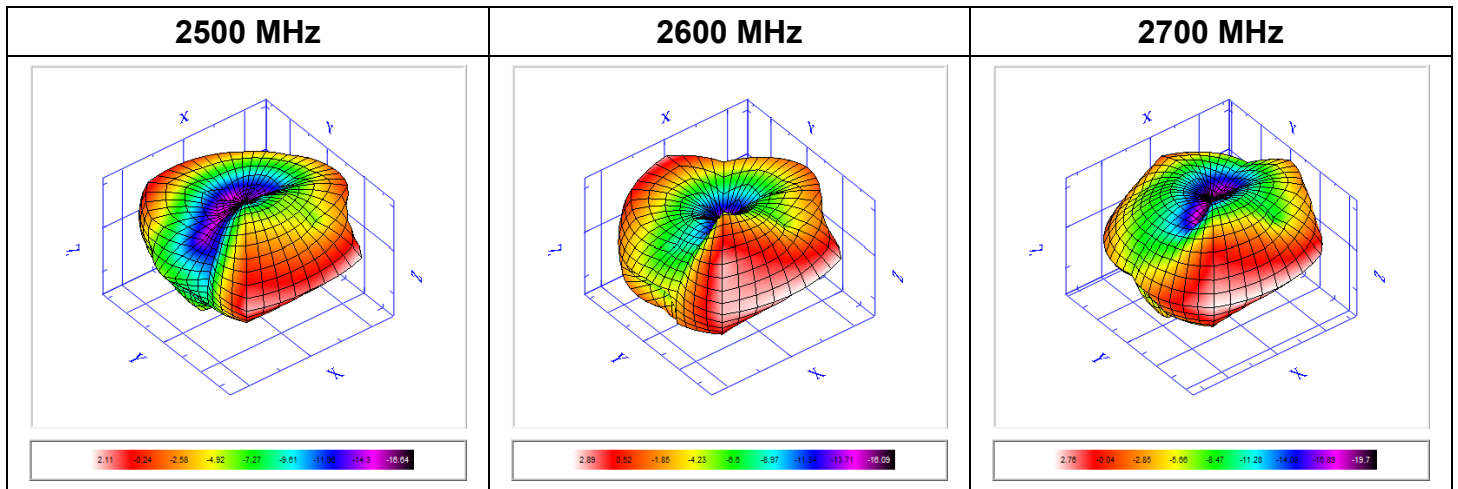
Stop 3 GHz

Date: 7.JUL.2015 23:23:48

**Product Number: DS2600-0201BSM**

**Product Name: Antenna**

**( . Antenna - Radiation Pattern Test Data**



Frequency	2500	2520	2540	2560	2580	2600	2620	2640	2660	2680	2700
TRP (dBm)	-2.64	-2.11	-2.2	-2.26	-2.13	-1.94	-2.41	-1.86	-2.28	-1.87	-2.29
Peak EIRP (dBm)	2.11	2.48	2.57	2.58	2.37	2.89	2.77	2.97	2.66	2.89	2.76
NHPRP +/- 45 (degree)	-2.8	-2.26	-2.32	-2.36	-2.23	-2.05	-2.48	-1.97	-2.39	-1.99	-2.45
NHPRP +/- 30 (degree)	-3.65	-3.05	-3.09	-3.19	-3.04	-2.79	-3.26	-2.7	-3.09	-2.68	-3.11
E-Theta Peak Gain (dBi)	-8.17	-8.77	-9.53	-9.16	-7.26	-8.09	-8.93	-8.32	-7.96	-7.43	-8.55
E-Phi Peak Gain (dBi)	2.03	2.46	2.55	2.56	2.29	2.87	2.64	2.97	2.65	2.56	2.76
E-Total Peak Gain (dBi)	2.11	2.48	2.57	2.58	2.37	2.89	2.77	2.97	2.66	2.89	2.76
Directivity (dBi)	4.74	4.59	4.77	4.84	4.51	4.83	5.18	5.18	4.94	5.15	5.06
Efficiency (%)	54.51	61.58	60.31	59.42	61.18	64.02	57.46	65.13	59.1	65.05	58.99

**) . Mechanical Drawing**

**See attached files**

**6. Material Description and RoHS Test Report**

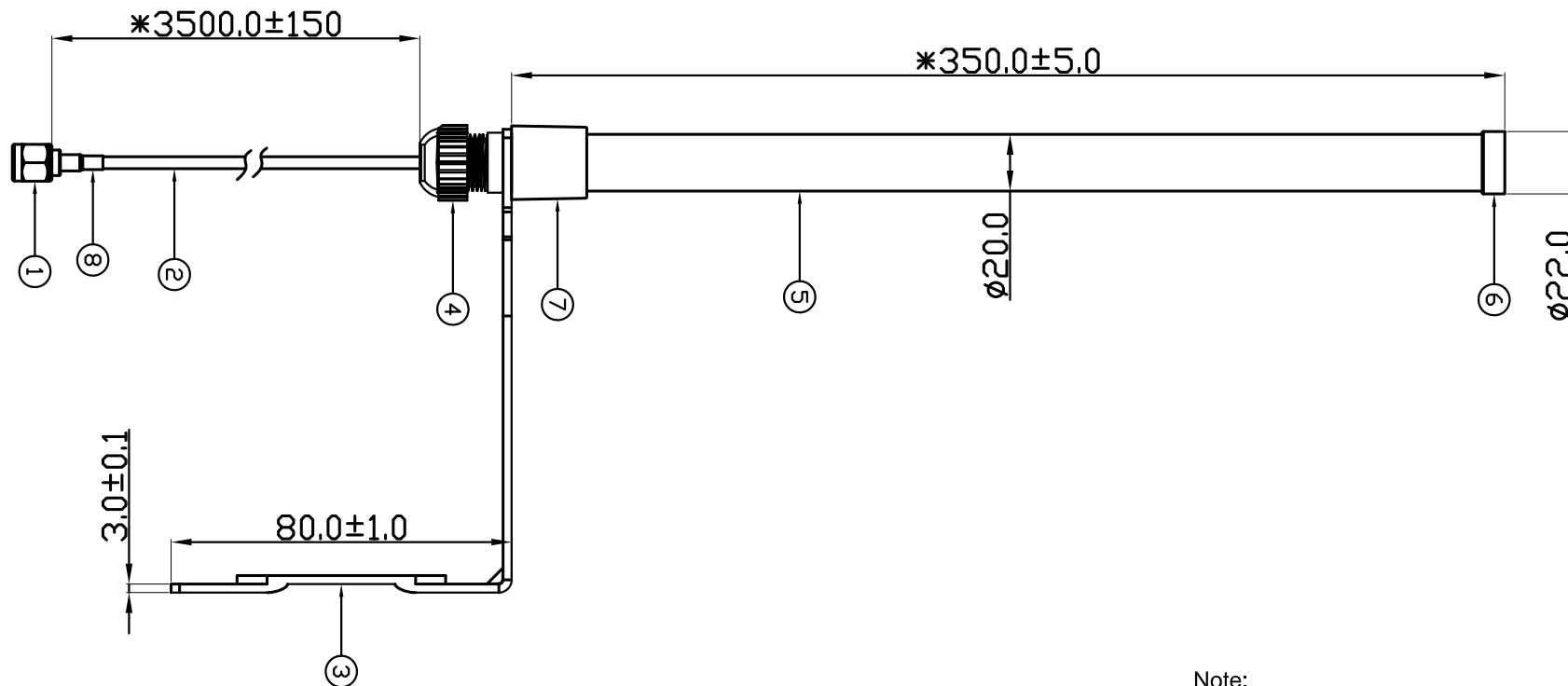
**See attached files**

# RoHS

## Compatible



SIGN	DATE	DESCRIPTION	APPROVER
△			
△			
△			



Note:

- 1.Take " \* "is the important dimension.
- 2.Tolerance:Unmarked tolerance refer to the standard tolerance please.

8	R-HSTUBE-006N	熱縮套管	EVA	Ø6.0*20.0mm	1
7	SCR-AN2626-CN	螺杆	Cu	Ni plated	1
6	CAP-AN2280-CN	帽頭	Cu	Ni plated	1
5	DS20-339B	Body	FRP	Black	1
4	DR4002-M12B	Cable Gland	ABS	Black	1
3	DR4002-17026	Bracket	Iron	Ni plated	1
2	R-CB-LMR200	Cable	Cu	Black	1
1	SMA010-CGT558-A	SMA Male	Cu	Au plated	1
No.	Part Number	Description	Material	Finished	Q'ty

TITLE: 2500-2700 MHz Antenna					
PART NO.: DS2600-0201BSM			CUSTOMER P/N: /		
APP BY	CHK BY	RF BY	DES BY		Tolerance
Grant 2015.07.09	Jack 2015.07.09		ZGR 2015.07.09		UNITS: mm SCALE: 1/1 REVISION: A

# 產品包裝規範

## PACKING CRITERION

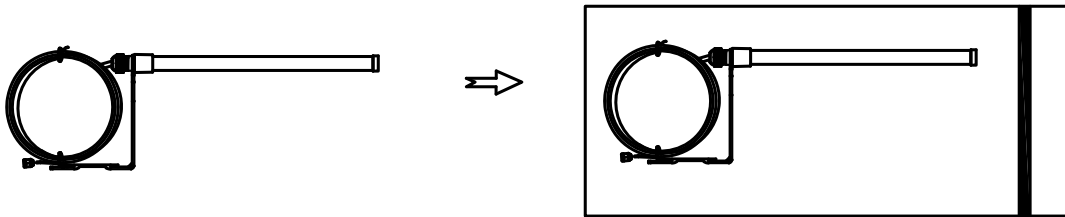


Date: 2015.07.09

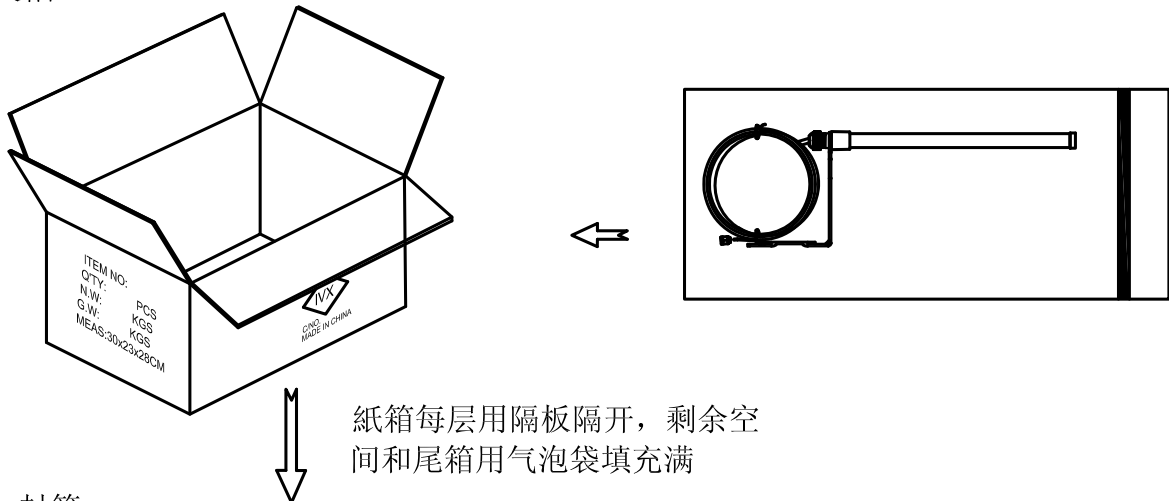
Page: 1 of 1

Part Number : DS2600-0201BSM	Revision : A
Name: Antenna	Customer : ALL

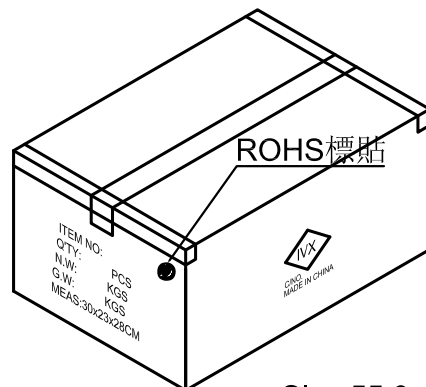
1. 產品入PE袋。



2. 裝箱。



3. 封箱。



Size:55.0x30.0x23.0cm  
30PCS/箱

APPROVED BY : Grant

CHECKED BY : Jack

DESIGNED BY : ZGR

SGS 台灣網站 → [http://twap.sgs.com/sgsrsts/chn/cheres\\_tw.asp](http://twap.sgs.com/sgsrsts/chn/cheres_tw.asp)  
 SGS 大陸網站 → [http://rsts.cn.sgs.com/chn/cheres\\_cn.asp](http://rsts.cn.sgs.com/chn/cheres_cn.asp)  
 SGS 韓國網站 → [http://rohs.kr.sgs.com/sgsrsts/en/cheres\\_en.asp](http://rohs.kr.sgs.com/sgsrsts/en/cheres_en.asp)

請輸入以下報告正確資料及檢查碼以便查核

1. 報告編號
2. 報告日期 (YYYY/MM/DD)
3. 產品名稱 (輸入前 10 個字不含空白)
4. 圖示檢查碼 (依指示畫面)

### 物料中HSF對象物質含量調查表

A	
填表：	時麗
部門：	研發部
職務：	文員

物料名稱：DS2600-0201BSM

序號	物料型號	物料各構成名稱	各構成物料的材料	測試報告裡RoHS對應物質測試結果						檢測報告編號	測試日期	測試名稱	測試機構名稱
				Cd	Pb	Hg	Cr(VI)	PBBs	PBDEs				
1	SMA010-CGT558-A	SMA Male	銅	65	33551	N.D.	Negative			CANEC1508594105 A01	2015.06.01	C3604 Brass bar.	SGS
2			鍍金	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANML1410789606	2014.07.10	滾鍍:金溶液.	SGS
3	CAP-AN2280-CN SCR-AN2626-CN	帽頭螺桿	銅	65	33551	N.D.	Negative			CANEC1508594105 A01	2015.06.01	C3604 Brass bar.	SGS
4	DS20-339B	Body	玻璃纖維管	N.D.	N.D.	N.D.	N.D.			CANML1217921302	2013.01.05	Coating paint.	SGS
5	DR4002-17026	支架	鐵	N.D.	N.D.	N.D.	Negative			CANEC1418153104	2014.11.07	1010	SGS
6	R-HSTUBE-006N	套管	EVA	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1501457205	2015.02.02	HEAT SHRINKABLE	SGS
7	R-CB-LMR200	線材	PE	N.D.	N.D.	N.D.	N.D.	N.D.	N.D.	CANEC1409066101	2014.06.17	HDPE/XLPE/FPE	SGS
8			鍍錫銅線	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	CANEC1503461603A01	2015.03.25	TA	SGS
9			裸銅線	N.D.	N.D.	N.D.	Negative	N.D.	N.D.	CANEC1503461604A01	2015.03.25	BA	SGS

根據測試報告如實填寫鉛、鎘、汞、六價鉻、PBBs和PBDEs六項禁用物質的含量

包裝材料中鉛、鎘、汞、六價鉻總含量不超過100ppm，鎘的允許濃度為5ppm

歐盟ROHS指令豁免條款2009/95/BC、鋼中合金元素中的鉛含量達0.35%、鉛含量達0.4%、銅合金中的鉛含量達4%