SPECIFICATION

Part No.	:	**TI.15.3113**
Spec No.	:	**GW-433-3-H-SMAM**
Product Name	:	433MHz ISM Band Dipole Antenna 3dBi Gain
Features	:	SMA(M) Connector Hinge design for optimal reception 170*13mm Antenna Dimensions 37.6*12.5mm Hinge/Connector Dims ROHS Compliant
Photo	:	

REVISION STATUS

Version	Date	Page	Revision Description	Prepared	Approved
01	Mar 12th 2008	All	New product	TW Product Centre	Zita Lin
02	Mar 6th 2009	All	Antenna Spec	TW Product Centre	Ruben F. Cuadras

1.0 Introduction

The TI.15 series are high performance 433MHz omni-directional antennas. The TI.15 SMA plug mount antenna is ideal for general purpose used. The hinge design enables the antenna to position at optimal reception angle. With its 3dBi gain, this antenna can handle long range constant reception and transmission.

2.0 Key Antenna Performance Indicators

Applications	Industrial, Scientific and Medical
Frequency	433.05~434.79MHz
Gain	3dBi
Return Loss	-25dB
Impedance	50 Ohms
Polarization	Linear
VSWR	≦1.5:1
Housing	TPE
Connector	Hinged SMA(M) plug
Dimensions	170*13mm Antenna Dimensions 37.6*12.5mm Hinge/Connector Dims
Weight	23g
Operation Temperature	- 40°C to + 85°C
Storage Temperature	-40°C to + 85°C
Relative Humidity	40% to 95%

3.0 Test Set-up

Low Frequency 5 Meters Anechoic Chamber with 2D Scan System.

Figure 1: Anechoic Chamber

Agilent 8753ES Vector Network Analyzer

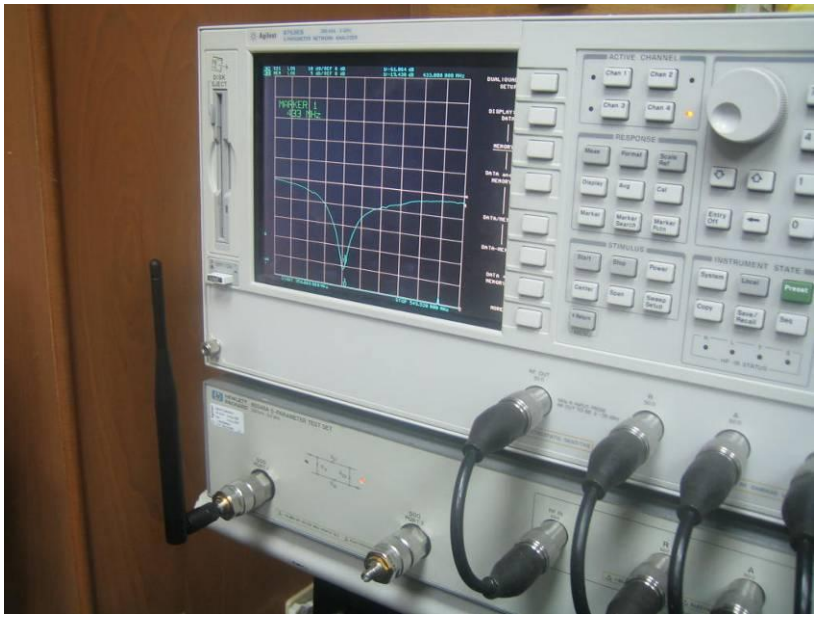
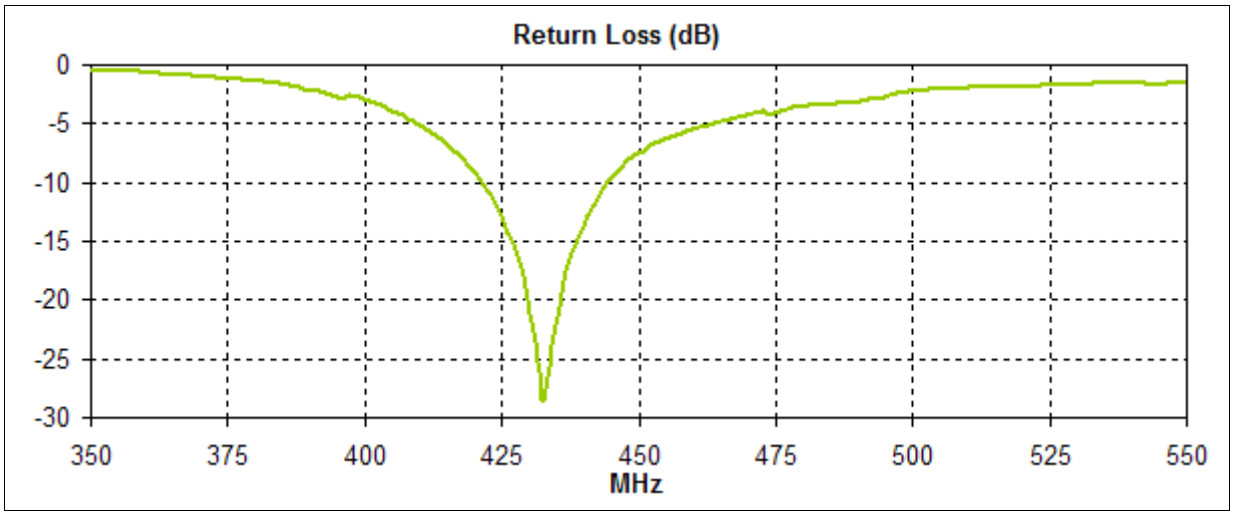


Figure 2: Network Analyzer

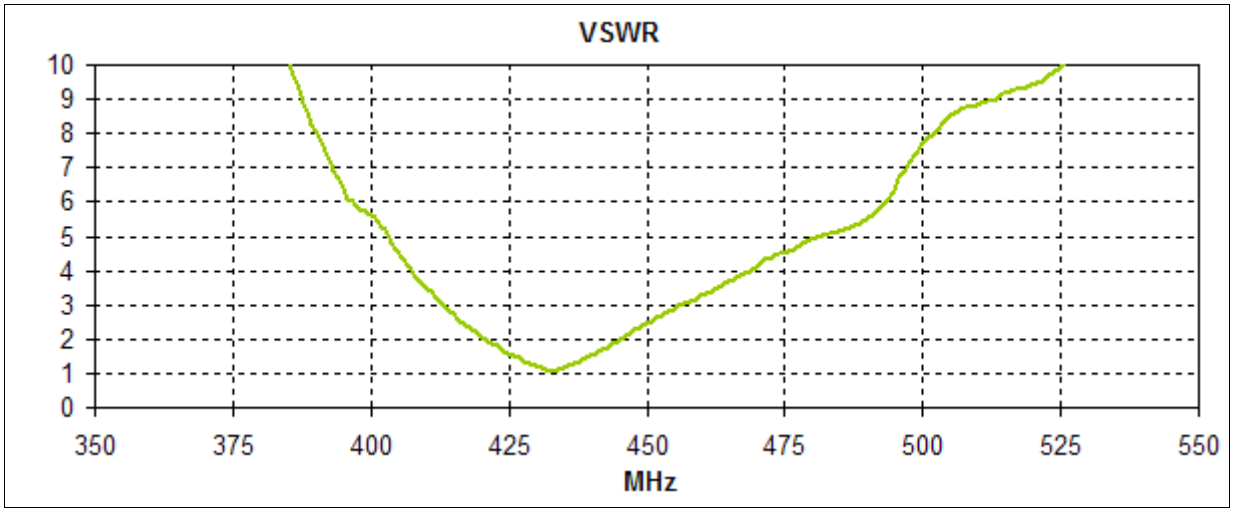
4.0 Antenna Electrical Characteristics

The next antenna parameter graphs like Return Loss, Smith Chart and VSWR were measured in the Agilent 8753ES Vector Network Analyzer. The Radiation Patterns were measured in a Low Frequency Anechoic Chamber.

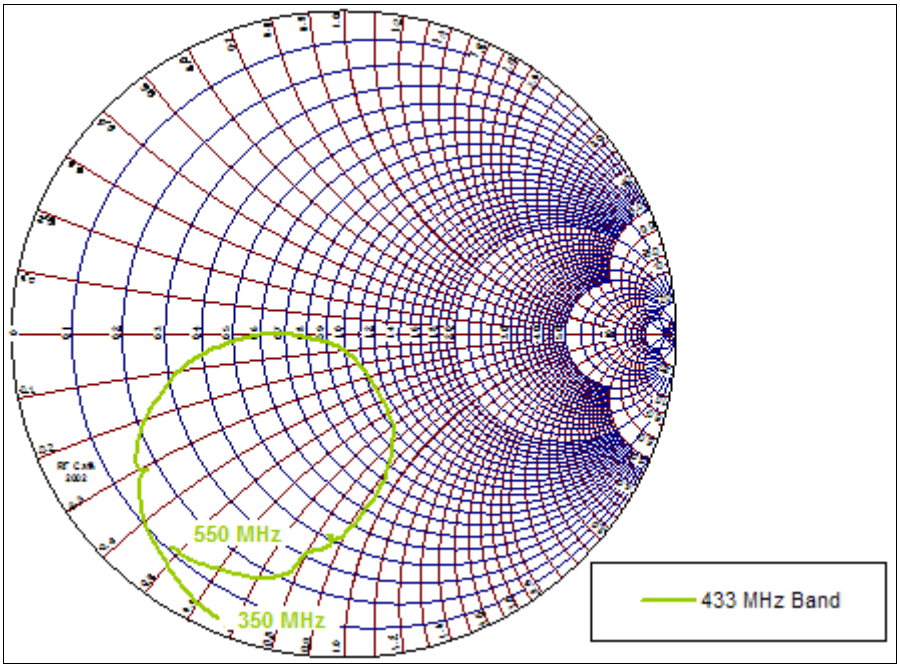
4.1 Return Loss



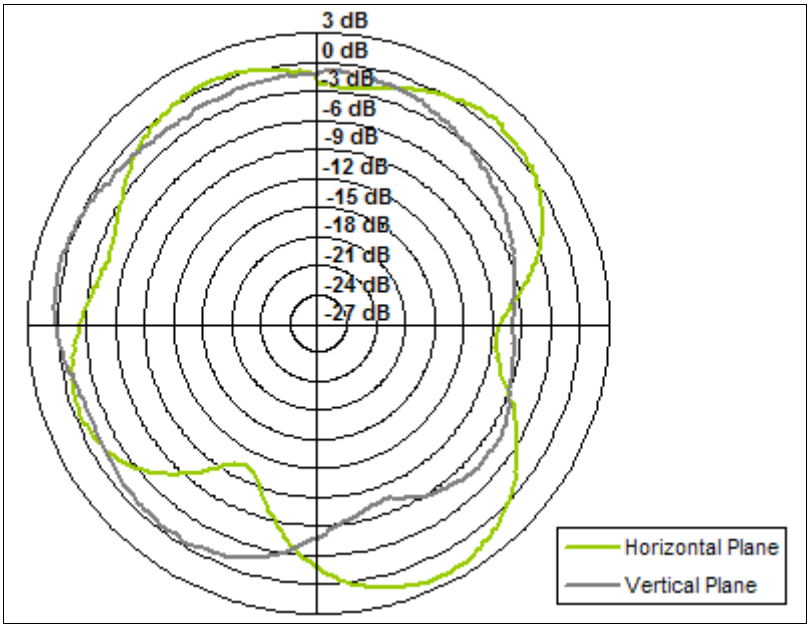
4.2 VSWR



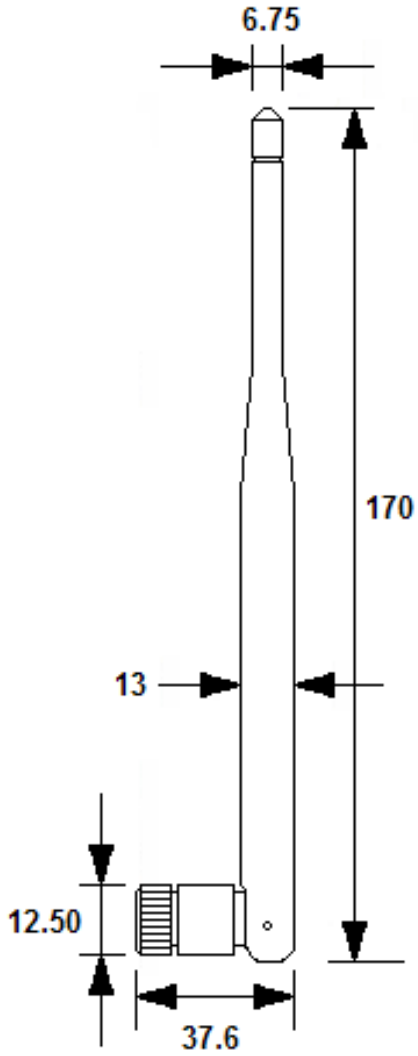
4.3 Smith Chart



4.4 Radiation Pattern Data



5.0 Mechanical Drawing



1. Hinge-SMA-Male Connector.
2. TPE housing, colour black..
3. RoHS Compliant

XXX.	±2.0	PART NO		PRODUCT NAME			
XX.	±1.0	GW-433-3		GW-433-3-H SMA(M) Helical Antenna			
X.	±0.5						
.X	±0.1	REV	UNIT	SCALE	SIZE	SHEET	FILE NAME
.XX	±0.05	A	mm	not	A4	1 OF 1	

taoglas
SD Design Centre