

Titanis 2.4 GHz Swivel SMA Antenna

Product Specification

1 Features

- Designed for 2.4 GHz applications [Bluetooth™, WiFi™ (802.11b/g), Zigbee™, WiMedia™ etc.]
- Also available as reversed thread (left) to meet FCC regulation part 15
- Intended for SMA mounting
- Supplied in bulk

2 Description

The Titanis antenna is intended for use with all 2.4 GHz applications. The antenna is fitted with an SMA male connector and a blade, made of a flexible material that can be rotated 360 degrees. No external matching net is required.

Titanis is available as standard SMA and reversed thread SMA.

3 Application

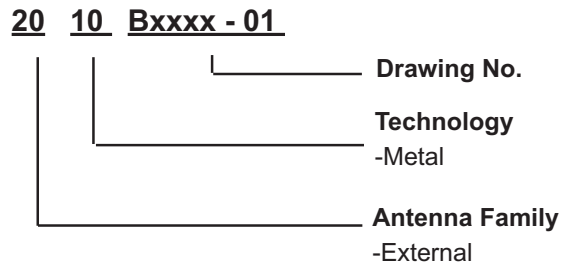
- Development tools
- Test equipment
- Instruments
- Access points and gateways
- Printers



Contents

1 Features	1
2 Description	1
3 Application	1
4 Model name	3
5 General data	3
6 Electrical characteristics	3
7 Electrical performance	3
7.1 Voltage Standing Wave Ratio	3
7.2 3D-Radiation	4
7.3 Radiation patterns	4
8 Antenna Dimensions	5
9 Electrical interface	5
9.1 Connection	5
9.2 Electrical performance test set-up	6
10 Reliability	6
10.1 Temperature and Humidity	6
10.2 Judgement standard	6
11 Hazardous Material Regulation Conformance	7
12 Packaging	7
12.1 Shelf storage recommendation	7
12.2 Packaging characteristics	7
12.3 Bag label information	7

4 Model name



5 General data

Product Name	Titanis 2.4 GHz
Article No.	2010B4844-01 (Standard)
	2010B6090-01 (Reverse thread)
Frequency	2.4-2.5 GHz
Polarization	Linear
Operating temperature	-40 to + 85 degC
Impedance	50 Ohm
Weight	7.4 gram
Antenna type	Swivel

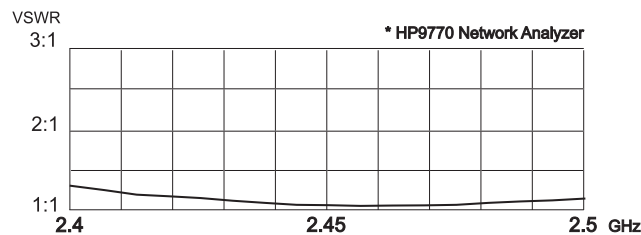
6 Electrical characteristics

	Characteristics			Conditions*
	Min	Typ	Max	
Peak Gain	4.0 dBi	4.1 dBi	4.4 dBi	Frequency 2.4-2.5 GHz, Measured in 3D chamber (near field)
Efficiency	80%	85%	90%	
VSWR	1.1:1	1.2:1	1.3:1	Frequency 2.4-2.5 GHz, Measured in Network Analyzer

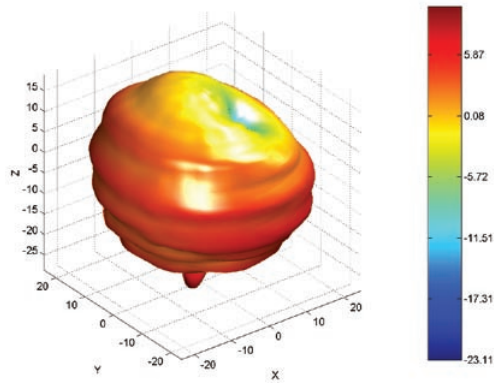
*Note all data provided in this table are based on the Antenna reference board

7 Electrical performance

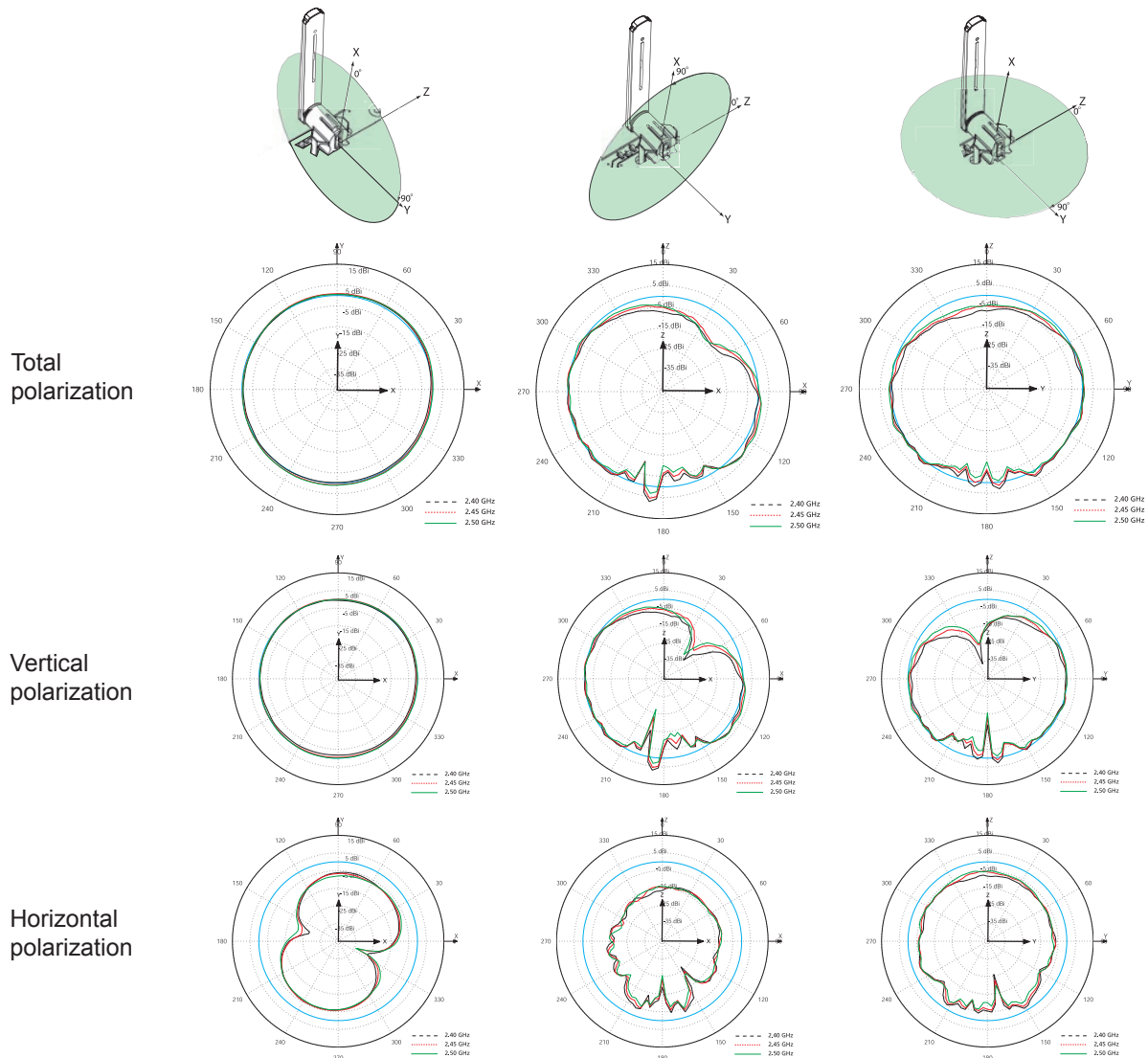
7.1 Voltage Standing Wave Ratio



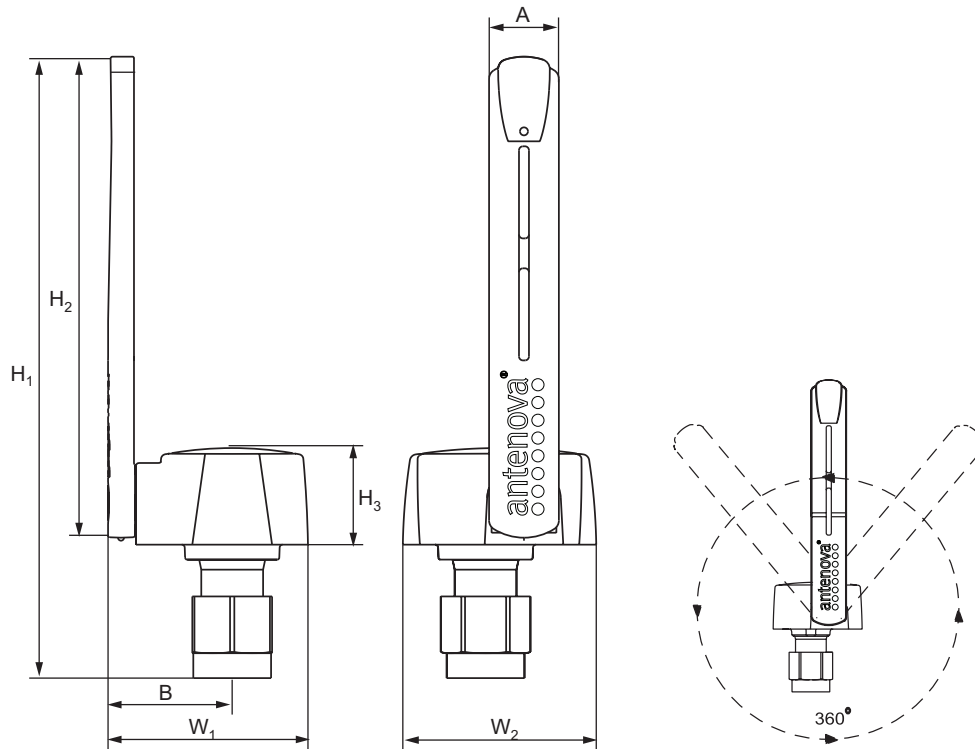
7.2 3D-Radiation



7.3 Radiation patterns



8 Antenna Dimensions



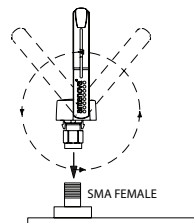
A	B	H1	H2	H3	W1	W2
		Height	Height	Height	Width	Width
7±0.2	12.5±0.5	62.5 ±0.5	48.3 ±0.5	9.5±0.5	20±0.3	19.5±0.3

Dimensions in millimeters

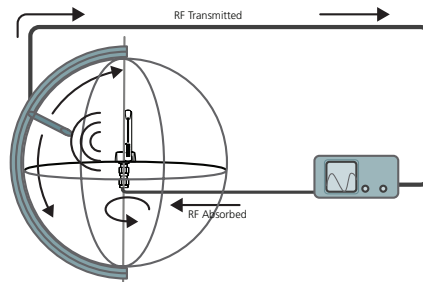
9 Electrical interface

9.1 Connection

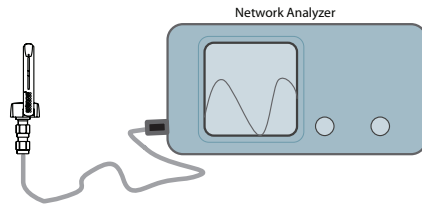
Titanis is fitted with an internal matching net. Connect the antenna directly to an SMA Female connector.



9.2 Electrical performance test set-up



Anechoic chamber set-up



Network analyzer set-up

10 Reliability

10.1 Temperature and Humidity

Item	Standard	Low	High	Duration
Operating temperature	EN/IEC 60068-2-2, Test Bd: Dry heat	-30 degC	+90 degC	-
Temperature cycling	EN/IEC 60068-2-14, Test Na: Change of temperature	-40 degC	+90 degC	500 cycles / 10 min
Storage life Humidity	EN/IEC 60068-2-1, Test Ca: Damp heat	+60 degC / 90% RH		500 h
Storage life Low temperature	EN/IEC 60068-2-1, Test Ad: Cold	-55 degC	-	500 h
Storage life High temperature	EN/IEC 60068-2-2, Test Bb: Dry heat	-	+125 degC	500 h

10.2 Judgement standard

The judgement of the above tests should be made as follows:

1. Visual inspection - Normal appearance with no obvious cracking, peeling-off.
2. Electrical inspection - The antenna satisfies the VSWR specification throughout the 2.4-2.5 GHz band

11 Hazardous Material Regulation Conformance

Cadmium and cadmium compound.	Lead and lead compound
Organic brominated compound (PBB, PBDE)	Mercury and mercury compound
Polychlorinated biphenyl (PCB)	Sexivalent chrome compound
Polychlorinated naphthalene (PCN)	Chlorinated paraffin (CP)
Organic tin compound	Mirex
Asbestos	Formaldehyde
Azo compound	Tetra-bromo-bisphenol-A-bis (TBBP-A-bis)

12 Packaging


12.1 Shelf storage recommendation

Temperature	-10 to +40 degree C
Humidity	Less than 75% RH
Shelf Life	48 Months
Storage place	Away from corrosive gas and direct sunlight

12.2 Packaging characteristics

The antennas are delivered in bulk enclosed in plastic bags

12.3 Bag label information

	
Antenna Article number :	XXXXXXXX-XX
Description :	Product name, Frequency Hz
Reel Quantity :	XXXX Pcs.
Order No:	Customer PO number
Date:	YYMMDD



www.antenova.com

Corporate Headquarters

Antenova Ltd.

Far Field House
Albert Road
Stow-cum-Quy
Cambridge
CB9 5AR

Tel: +44 (0) 1223 810600
Fax: +44 (0) 1223 810650
Email: info@antenova.com

Asia Headquarters

Antenova Asia Ltd.

3F, No 10, Alley 6, Lane 45
Poa Shing Road
Hsin Tien City
Taipe County
ROC 23145

Tel: +886 (0) 2 2917 6536
Fax: +886 (0) 2 2910 6546
Email: info@antenova.com

Sales Offices

Europe

Charlotta Olander

UK/EU Sales Manager

Tel: +46 702 913731
Email: Lotta.Olander@antenova.com

America

David Nuti

NA Sales Manager

Tel: +1 214 668 0357
Email: David.Nuti@antenova.com

Asia

CL Lim

VP Sales Asia

Tel: +886 (0) 931 201 318
Email: CL.Lim@antenova.com



Certificate No: 4598/04

Integrated Antenna Solutions