



Flexible PCB Antenna Series

P/N: FPC-00UA10A

UWB Flexible PCB Antenna SPECIFICATION



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Antenna Features

Electrical

UWB (3-6GHz)

Installation

Double Sided Adhesive

Direct Stick on Device Enclosure

Environmental

Dim: 36mm*24.4mm*0.13mm

-50°C~85°C Thermal Resistance

RoHS, REACH Compliant

Application

Navigation System Supporting

Drone

Vehicle Navigation System

IoT Device Navigation



NVC UWB Bands FPC Antenna

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1. Introduction

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NVC provides high quality ceramic patch antenna series for navigation system application. The ceramic patch antennas are easily installed into customer devices, through pin or SMT direct feed to exciting antenna to go high level and accurate satellites signals. Assist end user can get location located.

Such application, for example, drone/UAV application, the device needs accuracy location information in order to execute auto-pilot or return back to the point of departure. All these application, the device needs good satellites signals. NVC Patch series can offer high quality receiving satellites signals.

NVC provide different scenario options could be selected, please read the technical specifications to choose suitable solution for you. Or, contact local sales for supporting.

UWB bands	
Band	UWB
Frequency (GHz)	3~6 GHz
Technical Spec	
Peak Gain (dBi)	3.9
Efficiency (%)	>36
Polarization	Linear Polarization
Impedance	50Ω
MECHANICAL	
Dimension	36mm*24.4mm*0.13mm
Material Content	Flexible PCB
Coaxial Cable	φ 1.37mm Micro Coax., 87.3mm length, Fully Customizable
Connector	IPEX MHFI
Adhesive	3M467
Weight	2.4g/1pcs
Pulling Force	Minimum 2 KGF/cm2
ENVIRONMENTAL	
Operation Temperature	-40°C to 85°C
Storage Temperature	-40°C to 90°C
Humidity	Non-condensing 65°C 95% RH

*The antenna was tested on 2mm thick ABS board.



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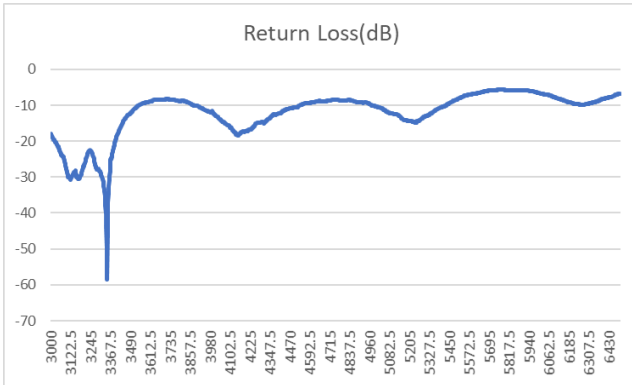
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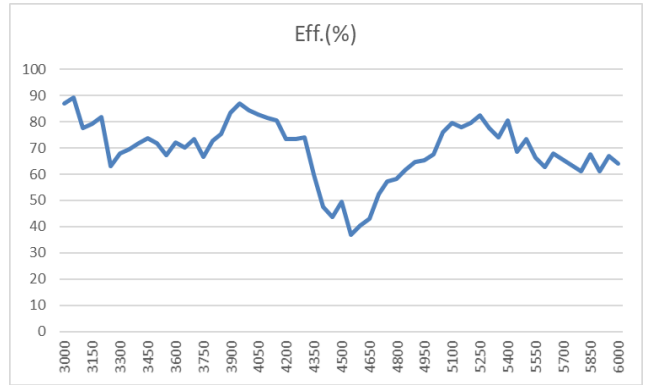
3. Antenna Characteristics

3.1. UWB Bands Antenna

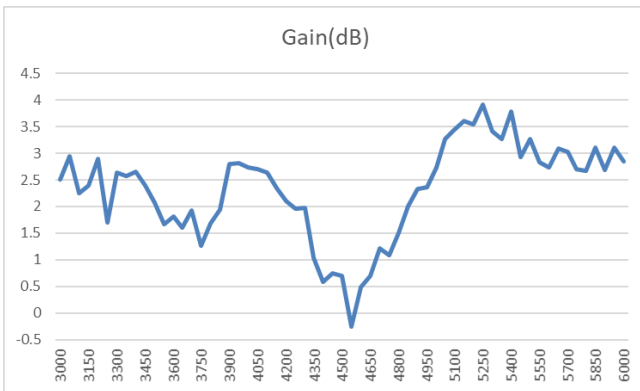
3.1.1. Return Loss



3.1.2. Efficiency



3.1.3. Peak Gain



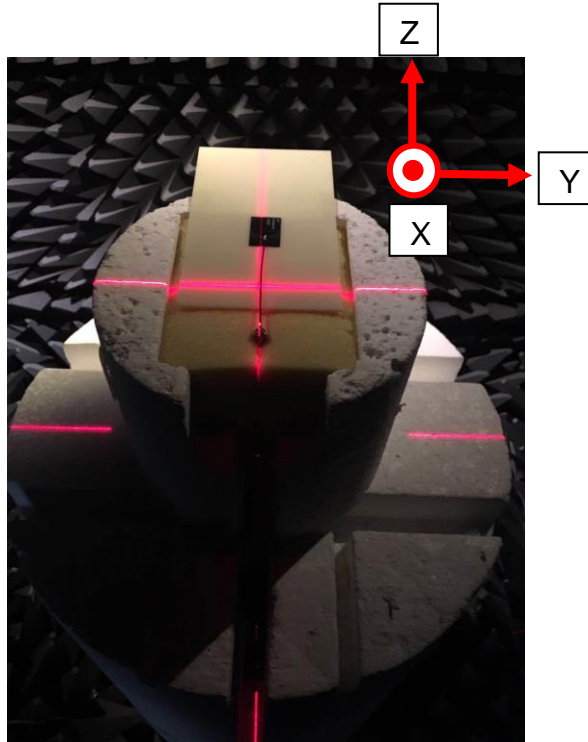


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3.1.4. Antenna Measurement Setup & 3D Patterns

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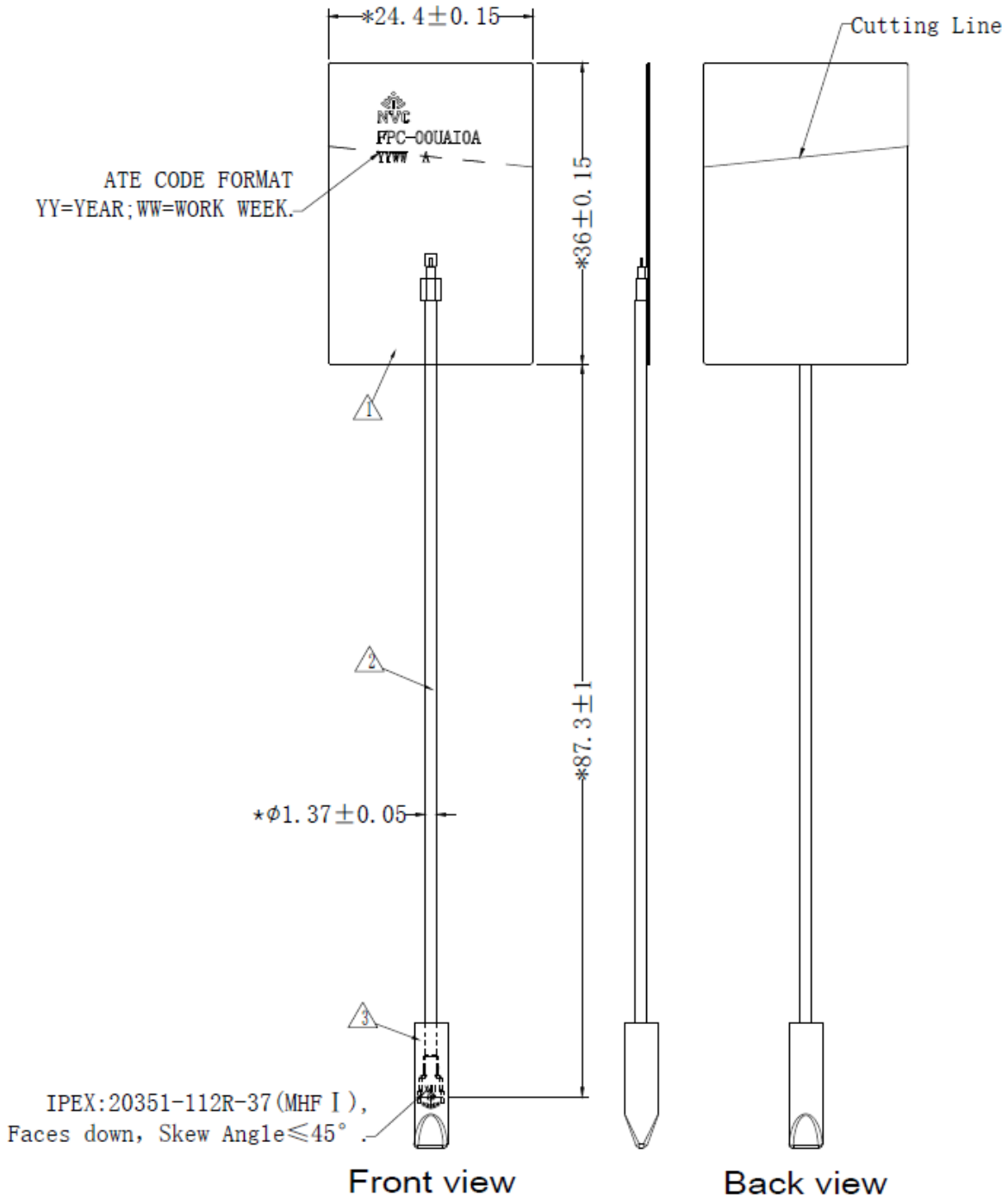
*Testing set in NVC GTS2800 compatible Anechoic Chamber



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4. Drawing

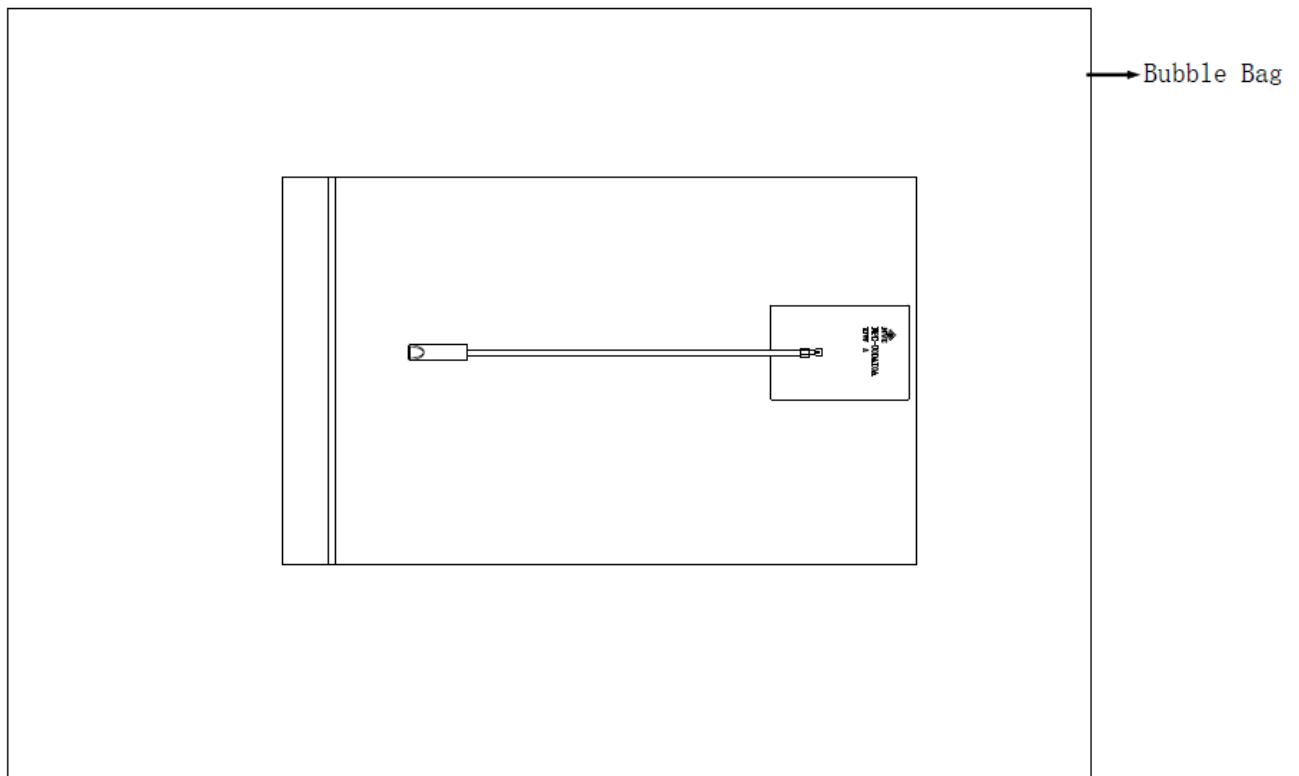
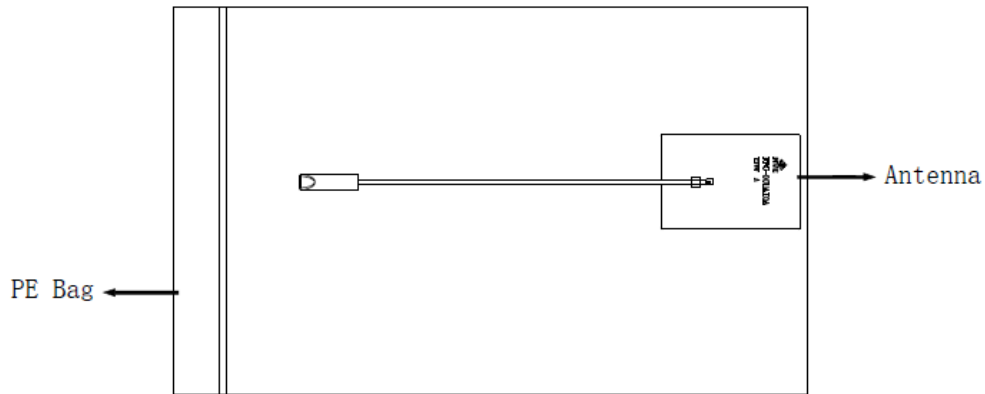
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3	66-FPC-00WAI0A01	RF plug protector: Φ3*L15	1
2	41-FPC-00UAI0A01	FPC-00UAI0A-Cable-Black-Φ1.37-IPEX1	1
1	40-FPC-00UAI0A01	FPC-00UAI0A-FPC-Black-PI	1
ITEM	Part NO.	Description	QTY

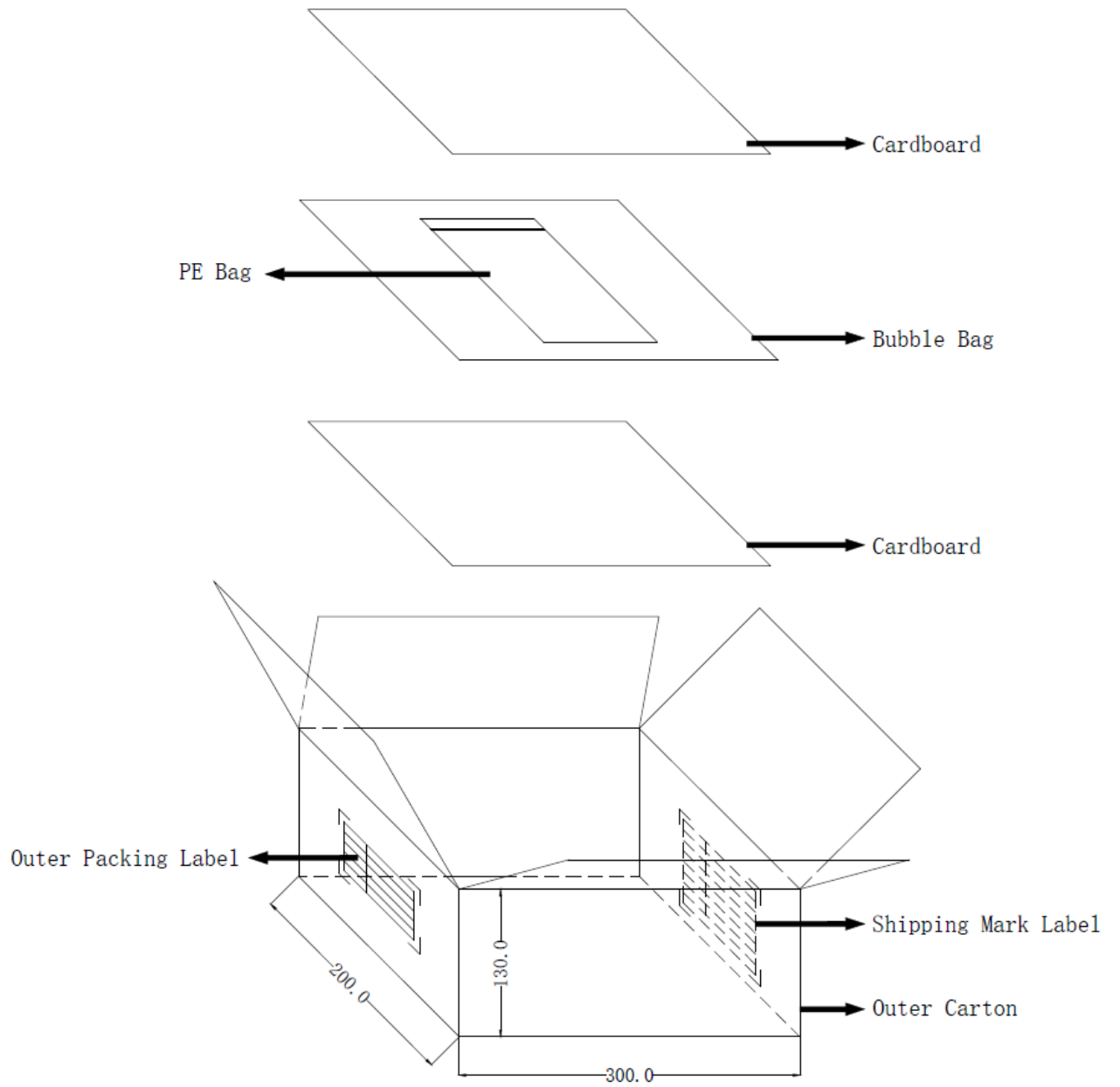
Unit: mm



10 pieces per PE Bag

200 pieces per Bubble Bag

2000 pieces per Outer Carton





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6. Application Note

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The antenna can be easily stick on the inner side of the device enclosure, please be aware any metal content part might affect antenna radiation performance. Please keep the metal content part as far as possible to antenna. If your evaluation cannot avoid the metal content part approximate to antenna body. Please contact your local supporting NVC sales, we will provide the best simulation in your application. Also, get the antenna fine tuned with the best performance delivery.