

SPECIFICATION

Product Name : GNSS antenna

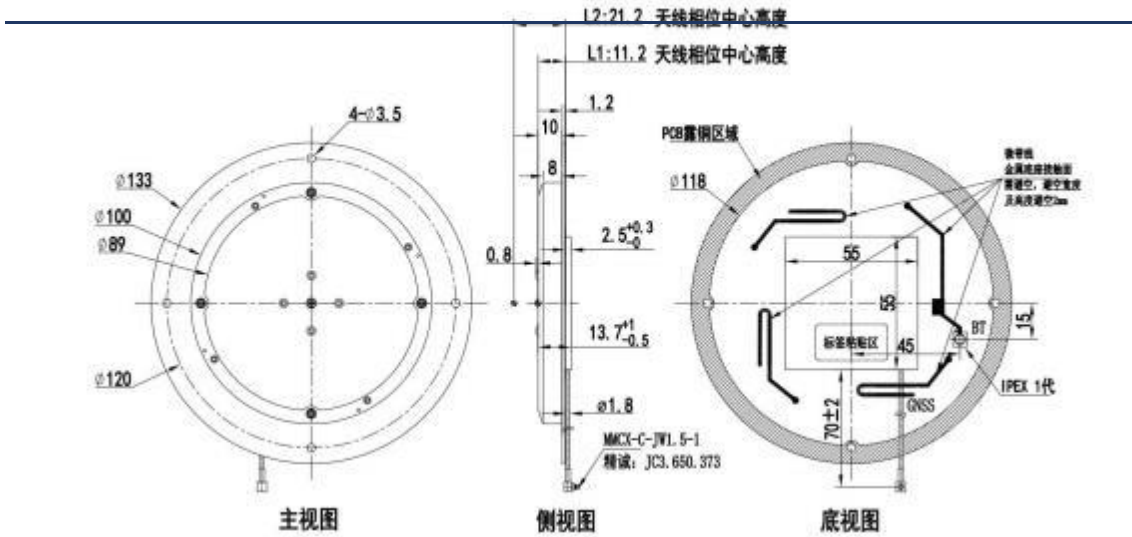
Model : PM269 (GRR08)

Order	UPDATE	VERSION	DATE
1	All chapters	V0.1	2023.7.28
2			
3			
4			
5			

Technical Parameter

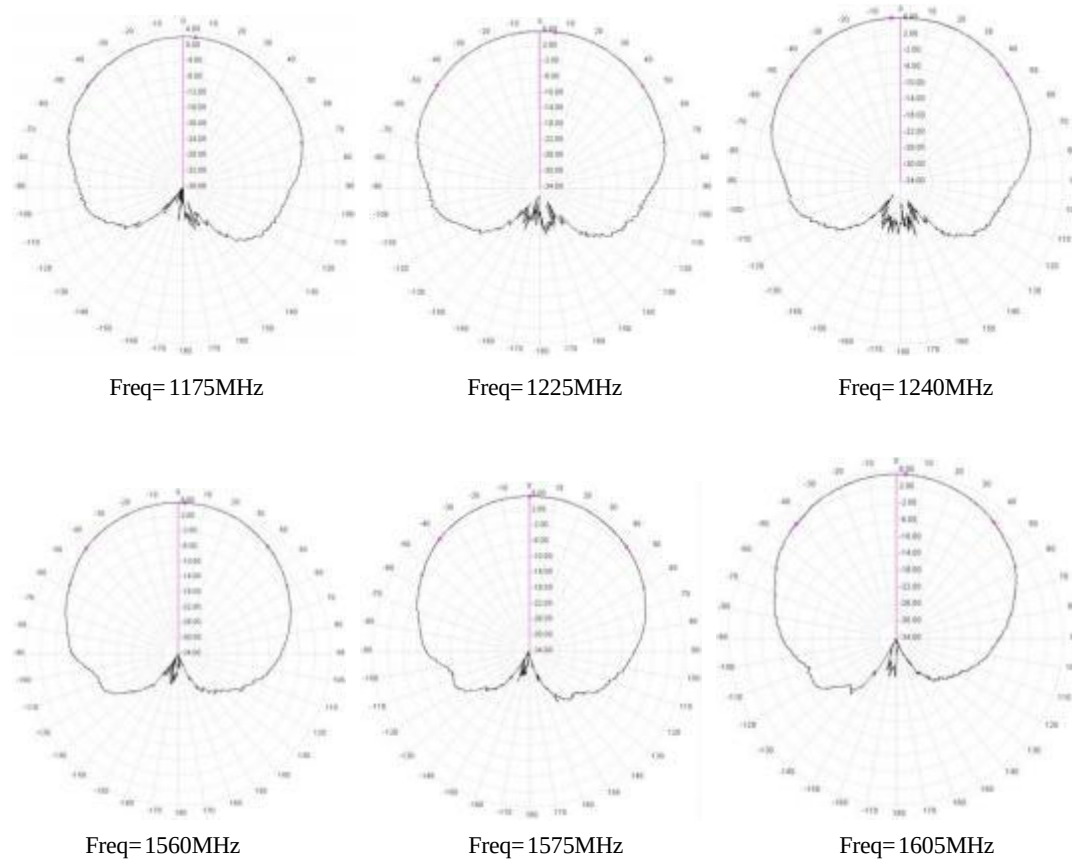
Antenna characteristics		LNAs characteristics		Structural&Environmental Adaptability	
Impedance	50 ohm	Figure	$\leq 1.8\text{dB}$	Weight	$\leq 220\text{g}$
Polarization mode	GNSS:right-handed circular polarization BT:linear polarization	Output vswr	≤ 2.0	Interface type	GNSS:MMCX-C-JW1.5 (精 诚: JC3.650.373) BT:Ipex-1
Antenna axis ratio	GNSS: $\leq 3\text{dB}$	In-band flatness	$\pm 2\text{dB}$	Installation method	Installation of 4 M3 screws
Coverage	$0^{\circ} \sim 360^{\circ}$	Working voltage	DC3.3~12V	Operation temperature	$-40^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Output vswr	≤ 2.0	Working current	$\leq 50\text{mA}$	Storage temperature	$-55^{\circ}\text{C} \sim +85^{\circ}\text{C}$
Maximum Gain	GNSS:6.1dBi BT:1.0dBi	Storage humidity	95%Non condensing	Phase Center Error	$\pm 2\text{mm}$

structure (general tolerance $\pm 0.3\text{mm}$)



Test date

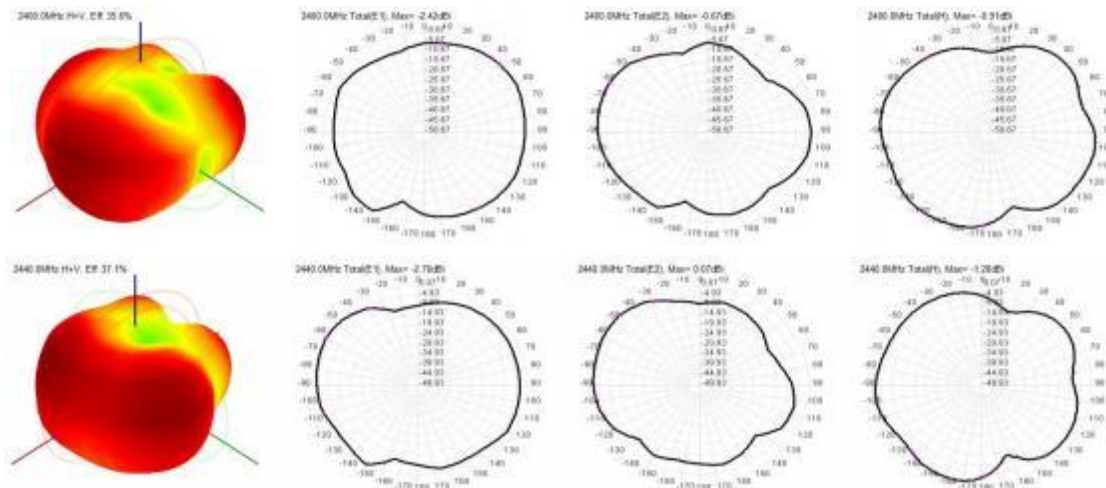
GNSS:

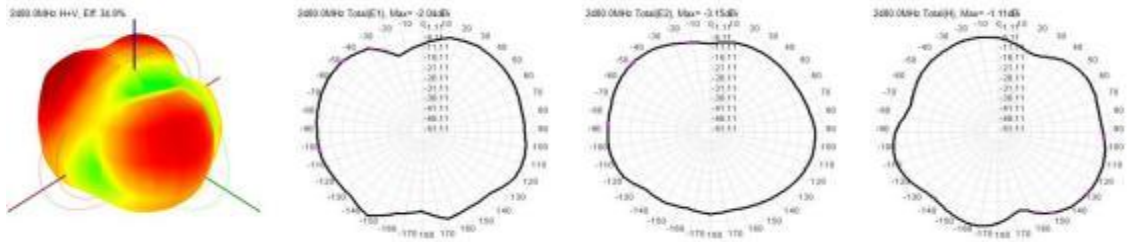


GNSS: (Gain)

Frequency (MHz)	1175	1205	1225	1240	1270	1540	1560	1575	1605
Normal gain (dBi)	2.5	4.5	5.7	6.1	5.2	4.5	5.6	5.8	5.3
Normal axis ratio (dB)	1.6	0.9	0.6	0.3	0.3	1.5	1.3	0.5	1.0

BT:





BT: (efficiency & Gain)

Frequency (MHz)	Gain (dBi)	efficiency (%)	Frequency (MHz)	Gain (dBi)	efficiency (%)
2400	0.47	35.6	2460	0.15	37.2
2410	0.15	32.5	2470	0.08	36.9
2420	-0.12	31.3	2480	0.79	35.2
2430	0.37	34.5	2490	0.47	31.3
2440	1.00	37.9	2500	0.23	29.6
2450	0.37	38.5			

BT ANTENNA



RFID PRODUCT CUSTOMIZATION

RFID TAG/READER/SECONDARY MOLDING/PRODUCT SOLUTION

Nanometer waterproof (soaked in seawater for 2 weeks)

Temperature resistance -50°C~200°C

Permeability 260



FPC NFC Tags

N06155F (Ntag213)

1. Product Overview

1.1 Introduction

N06155F NFC tag is an electronic tag made of FPC material. It is composed of NFC chip, antenna and substrate. It complies with the international standard 14443A protocol of non-contact card, and the working frequency is 13.56MHz. FPC material label can be bent, good consistency and stability, high temperature resistance and other excellent performance.

It does not carry a power source. It works by obtaining the energy from the reader through the antenna, and the communication between the reader and the reader is realized by radio frequency technology.

1.2 Features

1.2.1 RF Interface

- ISO/IEC14443A
- Contactless transmission of data and supply energy (no battery needed)
- Operating frequency: 13.56 MHz
- Fast data transfer: 106 Kbit/s
- High data integrity: 16-bit CRC, parity, bit coding, bit counting
- 7 byte UID (cascade level 2 according to ISO/IEC 14443-3)

- UID ASCII mirror for automatic serialization of NDEF messages
- Automatic NFC counter triggered at read command
- NFC counter ASCII mirror for automatic adding the NFC counter value to the NDEF message
- ECC based originality signature
- Fast read command
- True anticollision

1.2.2 EEPROM

- user memory: 144 bytes (36 pages)
- 4 bytes initialized capability container with one time programmable access bits
- Field programmable read-only locking function per page for the first 16 pages
- Field programmable read-only locking function above the first 16 pages per double page for NTAG213 or per 16 pages for NTAG215 and NTAG216
- Configurable password protection with optional limit of unsuccessful attempts
- Anti-tearing support for capability container (CC) and lock bits
- ECC supported originality check
- Data retention time of 10 years
- Write endurance 100.000 cycles

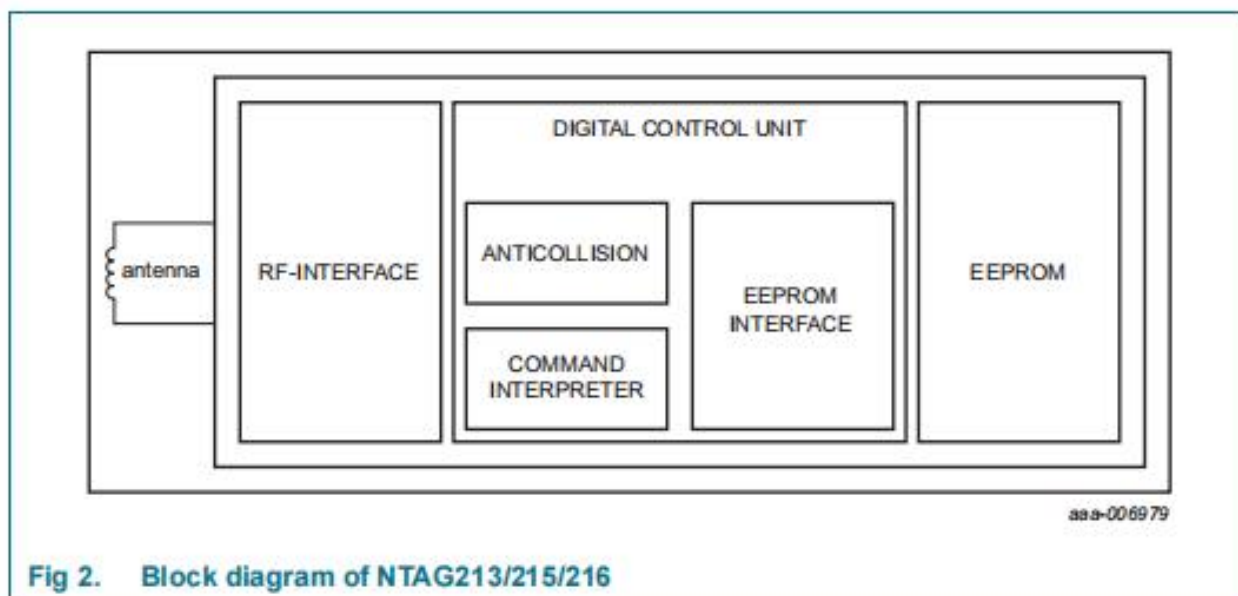
1.2.3 NFC Forum Tag 2 Type compliance

provides full compliance to the NFC Forum Type 2 Tag technical specification and enables NDEF data structure configuration.

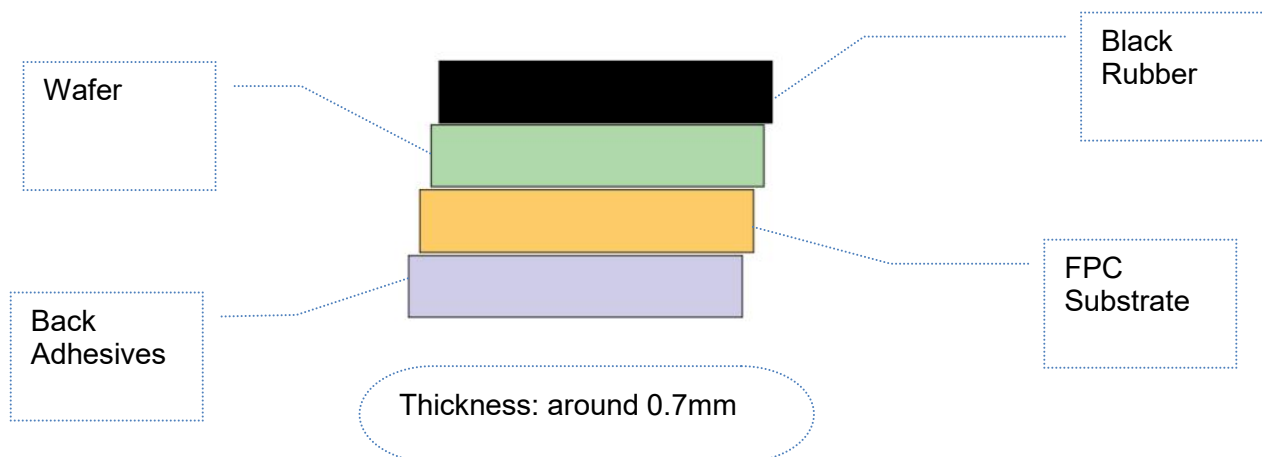
1.2.4 Physical Parameters:

- Read Range :20mm (NFC Mobail) , 30-50mm (NFC Reader)
- Size: 6*15.5mm
- temperature resistance: 150°C (2H) , 200°C (1-3min)
- Storage temperature: -20°C to 120°C
- Certification: Reach ,RoHS ,CE

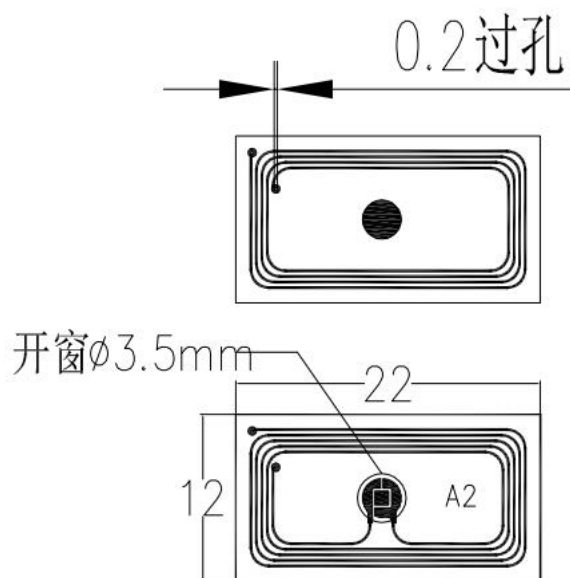
2. Block diagram



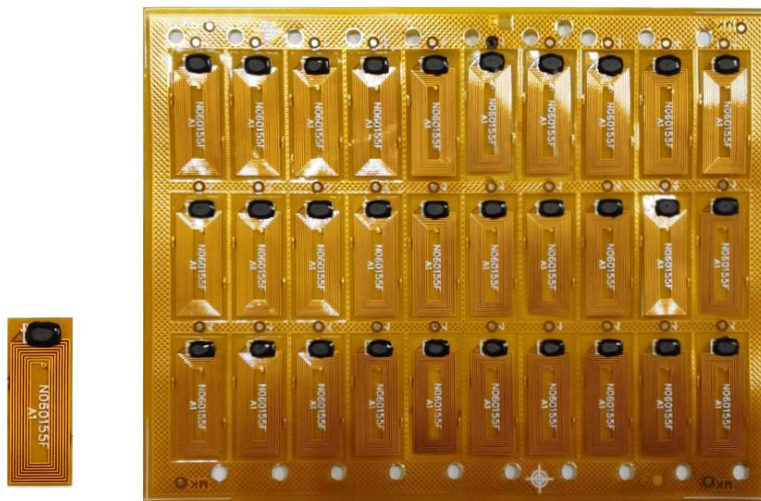
3. Structure chart



4. Size (mm)



5. Physical picture:



We statement that All measurements were performed radiated and therefore additional antenna gain documentation is not required.

