

SKA02C35-30RPSJ

External Antenna

Document Information

Title SKA02C35-30RPSJ External Antenna

Type Datasheet

Code SL-25070575

Version V1.01 (28-Jun-2024)

Confidentiality Level Public

Revision History

Version	Description	Writer	Date
V1.01	Original version	Lena	20240628

SKYLAB reserves all rights to this document and its information. SKYLAB owns all intellectual properties concerning products, names, logos, and designs in the document. Copying, using, modification, or disclosure of all or part of the document to third parties without SKYLAB's permission is prohibited.

SKYLAB assumes no liability for the use of the information contained in this document. No explicit or implicit warranties are provided, including, but not limited to, the precision, correctness, reliability, and suitability of the information. SKYLAB reserves the right to revise this document at any time. The latest update can be obtained from www.skylab.com.cn.

Copyright © 2024, Skylab M&C Technology Co., Ltd

SKYLAB® is a registered trademark of Skylab M&C Technology Co., Ltd. in China.

Table of Contents

Table of Contents	3
1 Product Appearance	4
2 Operating Conditions	4
3 Storage Conditions	4
4 GPS/BD Antenna Specifications	4
5 GPS/BD Amplifier Specifications	4
6 Product Photos	5
7 Mechanical Drawings	5
8 Contact Information	7

1 Product Appearance

Dimensions	48*48*19.5mm	Mounting Method	Adhesive
Weight	90 g	Connector Type	SMA
Shell Color	Black	Cable	RG174, 3meters

2 Operating Conditions

Temperature: -40°C~+85°C

Humidity: 95 % ~ 100 %

3 Storage Conditions

Temperature: -40°C~+85°C

Humidity: 95 % ~ 100 %

4 GPS/BD Antenna Specifications

NO.	Item	Specification	Post-Environmental Tolerance*
1	Receiving Frequency Range (MHz)	1555-1605 (MHz)	±2.5 (MHz)
2	V.S.W.R (at Center Frequency)	≤1.5	±0.5
3	Gain (Zenith, dBi typ, with 70 mm square GND plane)	3.5	±0.5
4	Axial Ratio (with 70 mm square GND plane)	6.0dB	±0.2
5	Polarization	Right-Hand Circular Polarization	----
6	Characteristic Impedance (Ω)	50	----
7	Frequency Temperature Coefficient (ppm/°C)	0±10	----

* Post-Environmental Tolerance refers to allowable deviation after environmental tests.

5 GPS/BD Amplifier Specifications

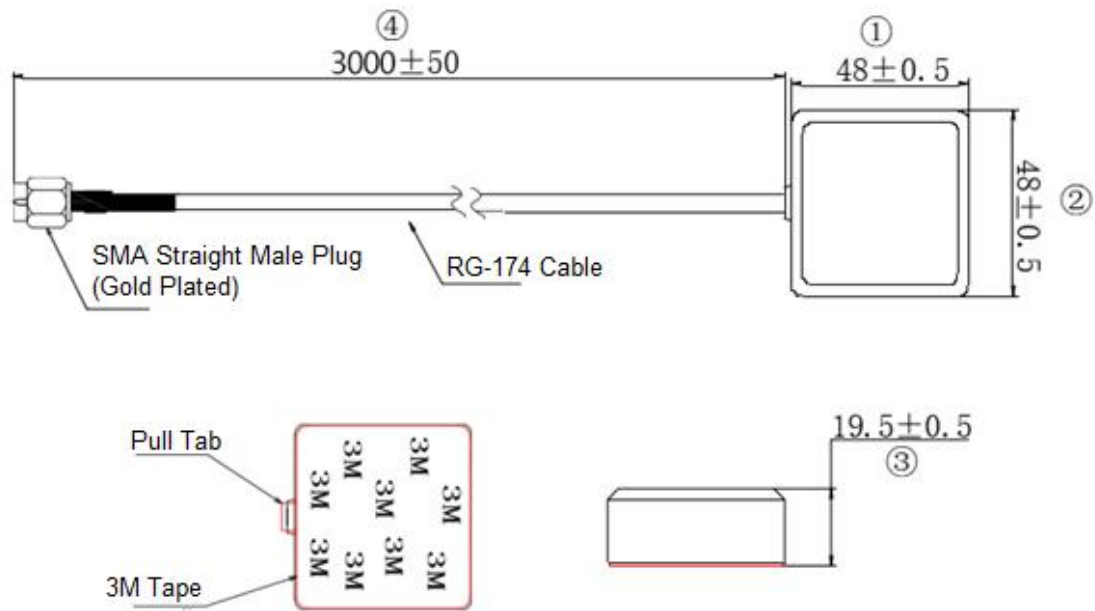
Item	Specification
LNA Gain (dB)	28 ± 2 (tunable for specific frequency points)
Output V.S.W.R	<2.0
Output Impedance (Ω)	50

Passband Ripple (dB, 1575.42 ± 5 MHz, LNA only)	±1.0	
LNA Output 1 dB Compression Point (dBm, LNA only)	>-2	
Out-of-Band Suppression	1575MHz±100MHz	46dBc min
Supply Voltage (V)	2.7~3.6	
Operating Current (mA)	<20	

6 Product Photos



7 Mechanical Drawings



Unless otherwise specified:

- $X = \pm 2 \text{ mm}$
- $X.X = \pm 0.3 \text{ mm}$
- $X.XX = \pm 0.05 \text{ mm}$

Unit: mm

8 Contact Information

Skylab M&C Technology Co., Ltd

Address: 11th Floor, Building 6, Hongchuang Science and Technology Center, Fucheng Street, Longhua District, Shenzhen, Guangdong, China.

Phone: 86-0755 8340 8210 (Sales Support)

E-Mail: sales1@skylab.com.cn

Website: www.skylab.com.cn www.skylabmodule.com