seeed studio

INDUSTRIAL PRODUCT DATASHEET

2.4GHz Rod Antenna for Seeed Studio XIAO

2.4GHz Rod Antenna for Seeed Studio XIAO: a REACH/RoHS compliant external antenna kit with SMA-to-I-PEX adapter cable, covering 2400–2500 MHz only for compatible 2.4 GHz XIAO projects.

SKU	UPDATED	PRICE
103990623	2026-11-02 06:45:15	$2.20(Excl. VAT)



Overview



The 2.4GHz Rod Antenna for Seeed Studio XIAO is an external antenna kit with a white rod antenna and SMA-to-I-PEX adapter cable for compatible Seeed Studio XIAO projects, covering 2400–2500 MHz only. It provides up to 2.81 dBi peak gain, 50 Ω nominal impedance, 3.0:1 maximum VSWR, and an omnidirectional azimuth pattern, and is suited for Industrial Sensor Networks, Agricultural Telemetry Systems, Drone Swarm Relays, and Embedded IoT Gateways.

Key Features

01 **4 GHz external antenna kit**

A white rod antenna and SMA-to-I-PEX adapter cable for compatible Seeed Studio XIAO projects. Covers 2400–2500 MHz only; not for 5 GHz Wi-Fi.

02 **RF characteristics**

Up to 2.81 dBi peak gain, 50 Ω nominal impedance, 3.0:1 maximum VSWR and an omnidirectional azimuth pattern. Gain and coverage depend on the installation; omnidirectional does not mean equal radiation in every direction.

03 **Mechanical integration**

Ø13 × 134 mm antenna housing, 12 g antenna weight and a SMA-Female connector as specified in the datasheet. Connect to the board through the included SMA-to-I-PEX cable; adapter cable length is TBD.

04 **Listed XIAO compatibility**

XIAO ESP32-C3, ESP32-C6, ESP32-S3 / S3 Sense and ESP32-S3 Plus for 2.4 GHz operation. XIAO ESP32-C5 is limited to 2.4 GHz with this antenna. Always match the board connector.

05 **Material compliance**

REACH/RoHS compliant, as specified in the linked datasheet.

06 **Disconnect power. Connect the SMA end of the included adapter to the rod antenna without twisting the coaxial cable.**

07 **Align the I-PEX plug with the matching board socket and press gently straight down. Do not force an angled or mismatched connector; leave cable slack for strain relief.**

08 **Position the antenna away from large metal surfaces where practical and test signal strength in the final enclosure. Antenna replacement does not add frequency bands to a board.**

09 **Recommended uses**

2.4 GHz sensor nodes, smart-home prototypes and enclosure-mounted Wi-Fi/Bluetooth projects. Communication distance depends on the board, transmit power, orientation, obstacles and interference; no fixed range is guaranteed.

10 **Choose a board**

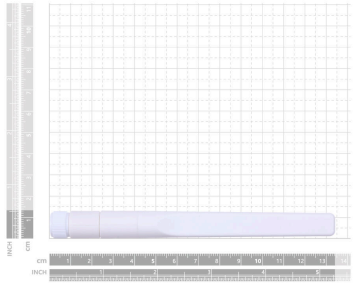
XIAO ESP32-C3; XIAO ESP32-C6; XIAO ESP32-S3 / S3 Sense; XIAO ESP32-S3 Plus; XIAO ESP32-C5 — 2.4 GHz only with this antenna. Development boards are sold separately from this kit.

Product Gallery

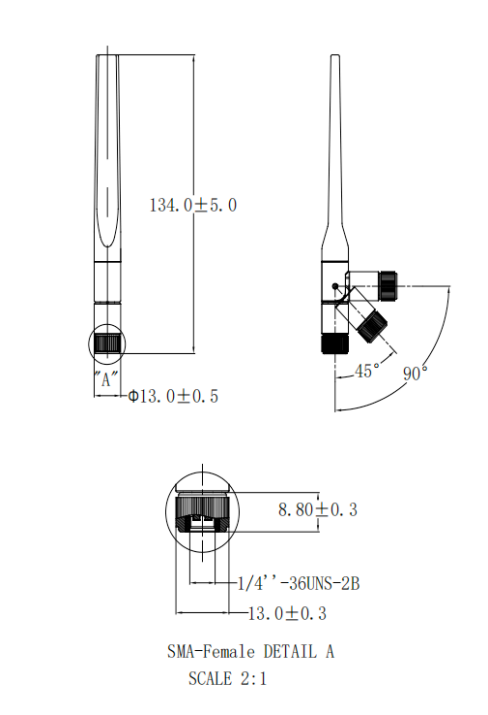


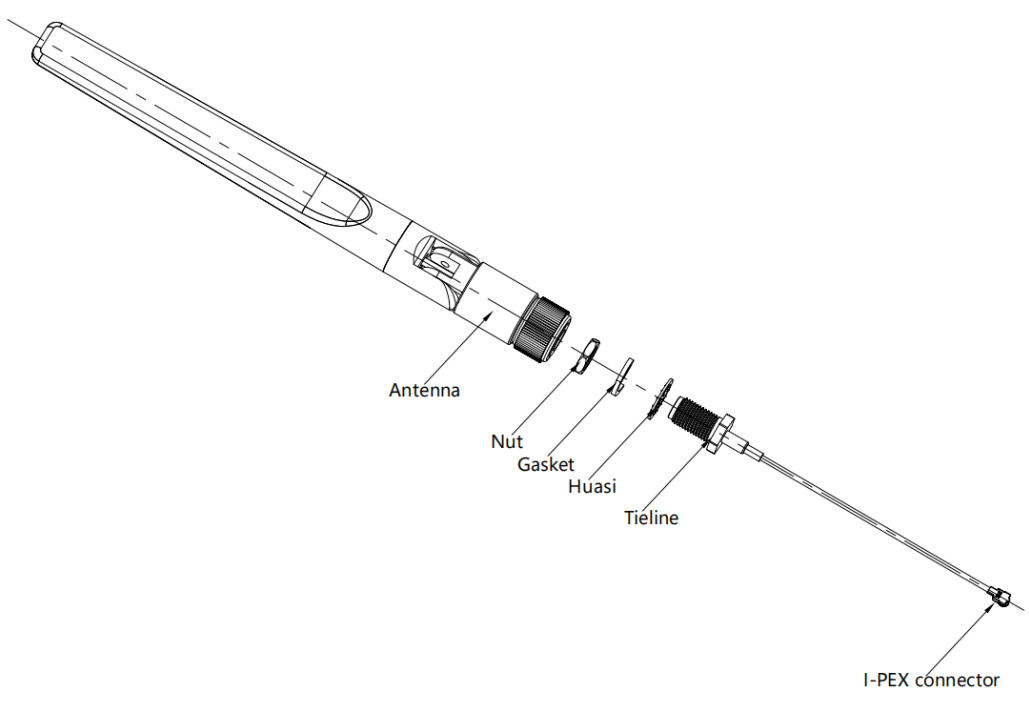






Hardware Overview





Applications

- **Industrial Sensor Networks**
- **Agricultural Telemetry Systems**
- **Drone Swarm Relays**
- **Embedded IoT Gateways**

Resource Links

- https://www.seeedstudio.com/2-4GHz-2-81dBi-Antenna-for-XIAO-ESP32C3-p-5475.html
- Datasheet-2.4GHz Rod Antenna (2.81dBi) for Seeed Studio XIAO

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