

LINOVISION ANT-5GCombo7

LINOVISION 5G LTE MIMO Combo 7-in-1 Antenna (ANT-5GCombo7) User Manual

1. INTRODUCTION

This manual provides detailed instructions for the installation, operation, and maintenance of the LINOVISION 5G LTE MIMO Combo 7-in-1 Antenna (Model ANT-5GCombo7). This antenna is designed for outdoor use, offering comprehensive connectivity with 4x 5G LTE, 2x Wi-Fi, and 1x GNSS capabilities. Please read this manual thoroughly before installation and use to ensure proper functionality and safety.

2. PACKAGE CONTENTS

Verify that all items listed below are included in your package. If any items are missing or damaged, please contact LINOVISION support.

- 1x LINOVISION 5G LTE MIMO Combo 7-in-1 Antenna (ANT-5GCombo7) with integrated 3-meter (10ft) cables
- 1x User Manual



Image: Package Contents. The image displays the LINOVISION 5G LTE MIMO Combo 7-in-1 Antenna with its multiple cables and a small user manual booklet.

3. SPECIFICATIONS

The LINOVISION ANT-5GCombo7 antenna features robust design and comprehensive connectivity options.

Feature	Description
Antenna Type	7-in-1 Combo (4x 5G LTE MIMO, 2x Wi-Fi, 1x GNSS)
5G LTE Frequency Range	698~960MHz / 1710~2690MHz / 2900~3800MHz
Wi-Fi Frequency Range	2400~2483.5MHz / 4900~5925MHz

Feature	Description
GNSS Frequency Range	1561.098~1575.42MHz
Connectors	4x SMA Male (5G LTE), 2x RP-SMA Male (Wi-Fi), 1x SMA Male (GNSS)
Cable Length	3 meters (10 feet)
Mounting Type	Screw Mount (Outdoor Roof Type)
Ingress Protection	IP67 (Water and Dust Resistant)
Impedance	50 Ohms
Product Dimensions	7.48"L x 5.91"W x 5.91"H (189mm x 150mm x 150mm approx.)
Item Weight	2.53 pounds (1.15 kg)
Color	Black

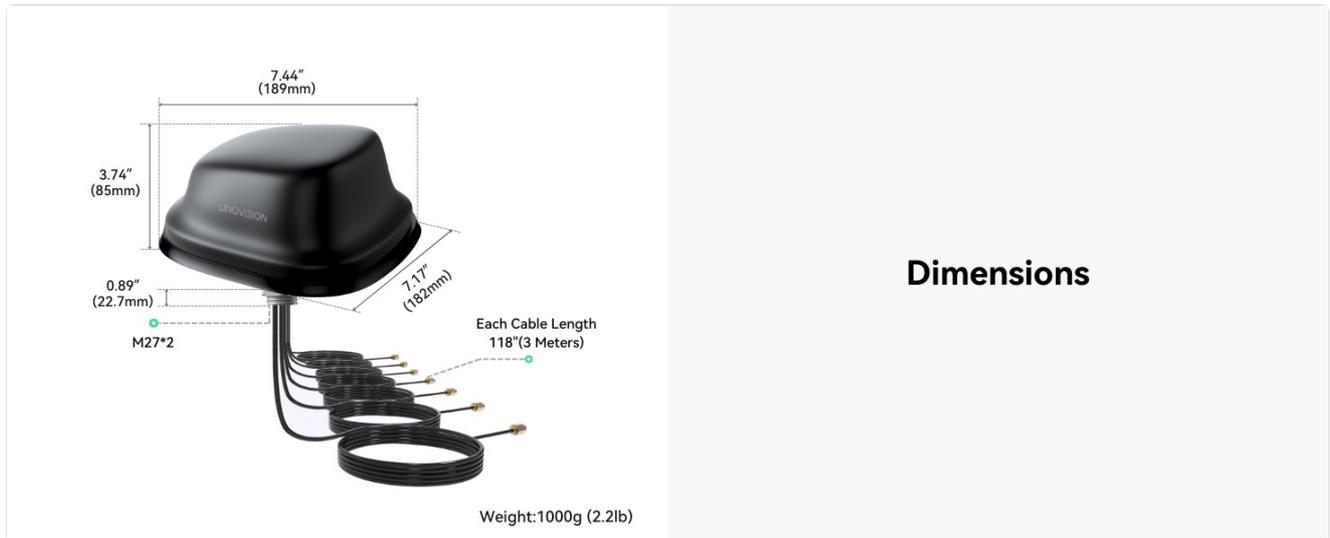


Image: Antenna Dimensions. A diagram illustrating the physical dimensions of the antenna, including length, width, height, and cable length.

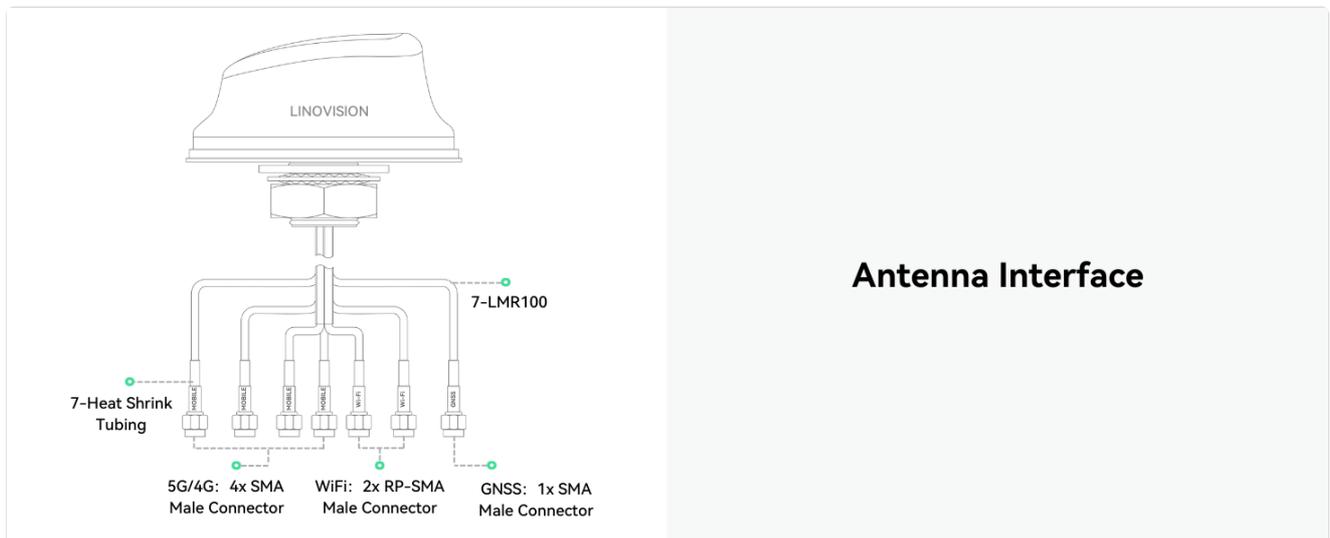


Image: Antenna Interface. A diagram showing the seven cables extending from the antenna, labeled with their respective connector types (4x SMA Male for 5G/4G, 2x RP-SMA Male for WiFi, 1x SMA Male for GNSS).

4. SETUP AND INSTALLATION

The LINOVISION ANT-5GCombo7 antenna is designed for outdoor roof mounting. Follow these steps for secure and effective installation.

4.1 Site Selection

- Choose a location on the roof that is clear of obstructions (e.g., metal structures, large equipment) to ensure optimal signal reception.
- Ensure the mounting surface is flat and sturdy enough to support the antenna.
- Consider the cable routing path to the cellular router, ensuring the 3-meter cables can reach without excessive tension or sharp bends.

Outdoor Roof SMA Antenna

IP67 Waterproof, water and dust-resistant for ultimate outdoor reliability.



Wide Temperature



Metal Enclosure



Relative Humidity



Image: Outdoor Roof SMA Antenna. The antenna is shown mounted on a vehicle roof, highlighting its IP67 waterproof rating and suitability for outdoor environments.

4.2 Mounting Steps

1. **Drill a Hole:** Drill a 0.98 inch (25mm) diameter hole at the selected mounting location on the roof. Ensure the hole is clean and free of debris.
2. **Insert Antenna:** Carefully insert the antenna's threaded base through the drilled hole from the outside.
3. **Secure with Nut:** From the inside, thread the securing nut onto the antenna's base and tighten it firmly to secure the antenna to the roof. Ensure a watertight seal.
4. **Connect Cables:** Connect the 4x SMA Male connectors to the 5G LTE ports on your compatible router, the 2x RP-SMA Male connectors to the Wi-Fi ports, and the 1x SMA Male connector to the GNSS port. Ensure all connections are finger-tight.

Installation

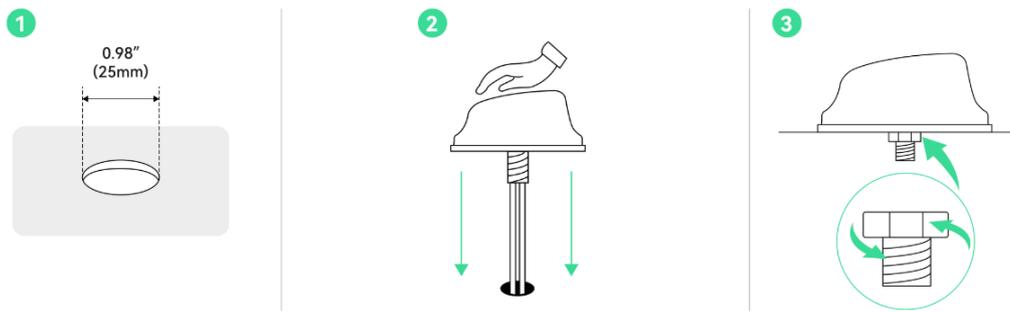


Image: Installation Steps. A three-step diagram showing how to drill a hole, insert the antenna, and secure it with a nut for roof mounting.

4.3 Compatible Routers

This antenna is compatible with most 5G LTE cellular routers that feature 2, 3, 4, 5, 6, or 7 antenna interfaces. Specifically, it is designed to work with Teltonika routers such as RUTM50, RUTC50, RUTX50, and TRB500 (equivalent to Teltonika PR1KC640).

5. OPERATING INSTRUCTIONS

Once installed and connected to a compatible router, the antenna operates passively to enhance signal reception for 5G LTE, Wi-Fi, and GNSS. No specific configuration is required for the antenna itself.

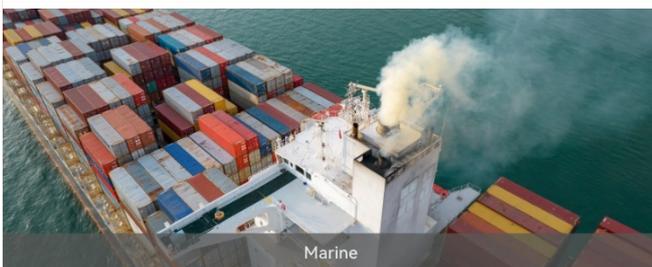
- Ensure your router is powered on and configured according to its own user manual to utilize the external antenna connections.
- For optimal performance, ensure the antenna is mounted in a location with a clear line of sight to cellular towers and GNSS satellites.



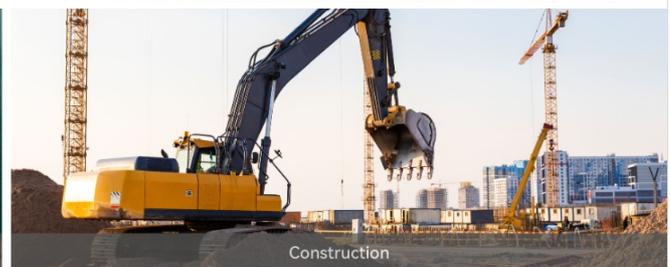
RV



Transportation



Marine



Construction

Image: Application. This image displays various application scenarios for the antenna, including RVs, transportation vehicles (trucks), marine vessels, and construction sites.

6. MAINTENANCE

The LINOVISION ANT-5GCombo7 antenna is designed for durability and requires minimal maintenance.

- **Regular Inspection:** Periodically check the antenna for any physical damage, loose connections, or signs of wear.
- **Cleaning:** If necessary, gently clean the antenna housing with a soft, damp cloth. Avoid using harsh chemicals or abrasive materials that could damage the surface.
- **Cable Integrity:** Ensure the cables remain securely connected to the router and are not pinched or damaged.

7. TROUBLESHOOTING

If you experience issues with your antenna, refer to the following common troubleshooting steps:

- **No Signal / Weak Signal:**
 - Verify all antenna cables are securely connected to the correct ports on your router.
 - Ensure the antenna is mounted in an unobstructed location with a clear line of sight.
 - Check your router's settings to confirm it is configured to use external antennas.
 - Test the signal strength in different locations if possible.
- **Intermittent Connectivity:**
 - Inspect cables for any damage or loose connections.
 - Ensure the antenna is firmly mounted and not subject to movement.
 - Check for potential sources of interference near the antenna or cables.
- **GPS/GNSS Inaccuracy:**
 - Confirm the GNSS cable is connected to the correct port on your router.
 - Ensure the antenna has a clear view of the sky for satellite reception.

If issues persist after attempting these steps, please contact LINOVISION customer support.

8. WARRANTY AND SUPPORT

LINOVISION is committed to providing reliable products and excellent customer service.

- **Warranty:** This product comes with a warranty. For specific warranty terms and conditions, please refer to the warranty card included with your product or visit the official LINOVISION website. Warranty and replacement services are provided from Texas, USA.
- **Spare Parts:** EU spare part availability duration is 6 years.
- **Technical Support:** LINOVISION offers 24/7 US local and global technical support.
- **Contact Information:** For technical assistance, troubleshooting, or warranty claims, please visit the LINOVISION official website or contact our support team directly.