Starlink Internet Antenna: Everything You Need to Know

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Published on: June 13, 2023

A Starlink internet antenna or Starlink dish antenna is a receiver that works by receiving internet data from satellites and then transforming it to a signal that can be sent through your WiFi router and made available for your home device connections.

The antenna features durable weather-resistant material capable of withstanding extreme weather conditions and temperature.

You can find dishes in two shapes; Square (rectangular) and round. We will show you how the Starlink antenna capability may vary depending on the dish shape.

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Types of Starlink Dish/ Antenna

Starlink dishes come in two shapes; Rectangular/square and Rounded shapes. The most common one now is the rectangular dish.

It is the latest version available for both residential and commercial use.

The rounded dish is the original version but is still popular among many people.

Here is an in-depth explanation of what you should expect from the antennas of these two types of Starlink dishes.

Rounded Starlink Dish Antenna

As the name implies, this dish is circular in shape and is easy to mount on roofs, balconies, or other surfaces.

The rounded dish antenna uses phased array technology to connect to the satellites.

It can track and connect to the closest satellite automatically and maintain a constant network connection even when the satellites move.

In terms of performance, the antenna is capable of transmitting data at high speed, making the internet connection fast and reliable.

Users with circular dishes usually report a speed of between 50-250 Mbps and a latency of 20-40 Ms.

Depending on your location and the Starlink plan you purchase, this dish

ideal for high-speed applications such as streaming media, online gaming, and video conferencing.

Here are the dish specifications:

- **Dish diameter**: 23.2 inches (58.9 cm)
- **Height:** 25.4 inches (64.5 cm)
- **Mast diameter**: 1.4 inches (3.6 cm)
- **Weight**: 16 lbs (7.3 kg)
- **Optimum operating temperature**: -30 degrees to 50 degrees
- **Outdoor use**: IP54 rated, which allows outdoor use
- **Mounted Option**: Available tripod

Starlink Square (Rectangular) Dish/Antenna

This is a new version of the round dish designed for residential and commercial purposes.

The commercial dish is larger, and its antenna offers a more advanced connection.

Generally, rectangular Starlink dishes are smaller and lighter than rounded ones but more efficient.

Rectangular/square dish antennas can withstand external interferences such as extreme cold and heat.

They feature a built-in heating system which is very effective in melting ice,

thereby preventing its build-up around the antenna.

Like the round dish, it uses phased array technology and can adjust its beam direction to automatically track the position of Starlink satellites in the sky for a constant connection.

It also ensures a high speed and lower latency. The first-generation rectangular Starlink speed and latency are similar to the rounded dish.

However, some commercial users have reported a download speed of up to 350 Mbps.

Here are standard rectangular Starlink dish specifications:

- **Dimensions:** 19 inches x 12 inches (50 x 30 cm)
- **Height**: 24 inches (61 cm)
- **Mast diameter:** 1.3 inches (3.4 cm)
- **Weight (cable included):** 9.2 lb (4.2 kg)
- **Operating temperature:** -30 degrees to 50 degrees
- **Outdoor use:** IP54 rated for outdoor use

The second generation Starlink high-performance dish dimension is around 22 inches by 12.9 inches (55 x 32 cm) and 4.75 inches (12cm) in height.

That said, the dish is larger, and the antenna guarantees better performance than the standard residential dish antenna.

Those using these dishes report a download speed between 150-500 Mb

This is better than the 50-250 download speed that most standard Starlink users report.

Rectangular satellite internet receiver

Best Satellite Antenna for RV

Starlink has launched a high performance dish for in-motion use in RVs.

The dish antenna offers a better speed, lower latency, and withstand extreme weather conditions, among other benefits over the original RV dish antenna.

According to SpaceX, flat high-performance dish antenna users should have their internet download speed and latency at the same level as the Standa residential plan offers.

This is around 50-250 Mbps download speed and 20-40 ms latency, an improvement from the 5-50 Mbps and 92 ms that the standard Starlink RV antenna offers.

However, these goodies come at a cost, as you will pay up to $2,500 for the hardware. You can get a comprehensive discussion on how these two Starlink internet dishes compare.

How Starlink Antenna Works

Starlink antennas work by communicating with constellations of satellites in low earth orbit.

They can automatically track the satellites, connect and maintain the network even when the satellite is moving across the sky.

The antenna receives internet data from the satellite.

It then changes the data into a signal that can be conveyed to your WiFi router from where you can connect your device.

You power Starlink dishes by plugging their energy power supply into a standard electric outlet. The good thing is it doesn't use a lot of power.

The round dish can consume somewhere in the range of 65-100W, while a second-generation rectangular dish consumes around 50-75W.

Starlink Antenna Mount Options

In the middle of your Starlink dish is the Low Noise Block-Converter that

contains the actual antenna.

That said, we will show you the mounting options for the dish with the antenna.

There is a wide range of mounting options to consider. How you mount your Starlink dish antenna will depend on factors such as your roof angle, obstruction and budget.

The Starlink base with the kit may not be enough to mount your dish.

In that case, here are some of the mount options you can choose from:

J-Mount

Pole Mount

Flashing Mount

Tripod Mount

Non-Penetrating Roof Mount

Tower Mount

Chimney Mount

Chimney holder for mounting Starlink antenna

Starlink Internet Antenna: FAQ

How Much Does Starlink Antenna Cost?

Your Starlink dish with the antenna comes in a kit along with the WiFi router, cables, and a base.

The kit currently costs $599 for the standard residential and Starlink RV.

However, the Starlink premium kit will cost you up to $2,500. These are the prices without shipping fees and taxes included.

What is the range of Starlink Antenna?

The antenna receives signals from Starlink satellites. Starlink satellites orbit at a low altitude of around 340 miles.

That means the antenna has a range of up to 340 and more.

Starlink Internet Antenna: Final Thought

Starlink internet antenna is the backbone of Starlink network connection, as it links your router and the satellites.

It communicates with the satellites, then transforms the data to signal for your router.

From there, you can access the signal using your device.

They come installed on Starlink dishes which are either rectangular, Square or round.

The capability of the antenna varies depending on the shape of the dish, with

About Bob Smith

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