



The company's first commercial satellite. | Photo source [Astranis](#)

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SMALLER SATELLITES FOR FASTER INTERNET

 TELECOMMUNICATIONS

A satellite communications company is taking a unique approach to delivering improved broadband speeds

Spotted: According to a report by Verified Market Research, the Global Satellite Communication market is projected to reach \$131.68 billion by 2028, a huge increase from a valuation of \$65.68 billion in 2020. One key driver of this growth is the need to deliver faster internet connectivity. San Francisco-based Astranis was founded to provide a new approach, featuring small satellites placed in geosynchronous orbit – a type of orbit where the satellite matches the rotation of the earth.

Astranis' satellites weigh around 350 kilograms and are designed to be compatible with every major launch vehicle, allowing them to fly as a rideshare on almost any system. The company's satellites are much smaller than other geosynchronous satellites on the market and are consequently much cheaper and faster to manufacture.

The satellites also use software-defined radio technology, allowing Astranis to digitally tune the satellites to different frequencies. This puts them at an advantage over traditional analogue satellites, whose frequencies are 'locked in'. It allows Astranis to manufacture satellites that are virtually identical, and then change the frequencies after reaching orbit. The company can then make changes to add extra capacity or accommodate changing conditions after launch.

The company's first satellite will be launched later this year and positioned above Alaska. Astranis' first customer—telecommunications provider Pacific Dataport—will use it to vastly increase data speeds to customers in the state. Astranis CEO John Gedmark [explained](#) the uniqueness of the company's approach, telling CNBC, "Putting down a focused beam of internet, right on a smaller or medium-sized country area, is just not something that has ever existed before."

The world's insatiable demand for increased bandwidth will lead to an estimated 100,000 satellites in orbit by 2030. This growth is leading not only to new innovations in satellite technology, but in technology designed to deal with this growth. Some of these adjacent innovations include a tracking system for [space debris](#) and a [wooden satellite](#) that burns up on re-entry, eliminating space debris in the first place.

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Takeaway:

Astranis has recently completed a new funding round, raising \$250 million from more than a dozen investors. The funding will be used to ramp up production. The company is confident that it can get the cost of satellite capacity significantly lower than it's ever been, while reducing build time to just a few months. If successful, the company will be able to deliver its mission of 'getting the next 4 billion people online'. Even today, [more than a third](#) of the world's population has never used the internet, and Astranis is just one company looking to use innovative satellite technology to improve global connectivity.