infiniDome Company Backgrounder

infiniDome front-end cyber solutions protect wireless communications from jamming interference. infiniDome products defend GPS-based systems that are critical for drones, connected fleets, critical infrastructure, and autonomous vehicles. infiniDome's products have been successfully proven in the field and sold to customers globally.

OUR ORIGINS

The founders conceived the name infiniDome to conceptualize radio signal waves propagating across the infinite bounds of space and time protected by an invisible dome that shields them from wireless attacks.

infiniDome products are the preferred choice in GPS anti-jamming solutions for drones, connected fleets, critical infrastructure, and autonomous vehicles – all applications that previously have had no access to GPS protection. As these vertical markets have grown, the need for GPS protection has become a necessity which is not met by large, heavy, and expensive military options. infiniDome is disrupting the anti-jamming market by delivering the industry's first non-military anti-jamming solution designed for commercial applications.

THE MARKET

GPS is a critical pillar that most national infrastructure relies on – including military, transportation, aviation and critical networks. As GPS jammers become more and more pervasive and attainable, they are used more routinely as a default tool for criminals and terrorists. Detecting and defending against these attacks is not only critical for the protection of the GPS systems but it's also very effective for the apprehension of the perpetrators.

According to Market and Markets, the overall anti-jamming market for GPS is expected to grow from USD 3.86 billion in 2018 to USD 5.50 billion by 2023 at a CAGR of 7.34%. High demand for GPS technology in military applications and ongoing developments to improve the overall GPS infrastructure are the key factors driving the growth of this market.

infiniDome is creating a new market by making GPS protection accessible to commercial verticals that previously could not justify the very expensive, large, heavy and military restricted solutions that were available until now. infiniDome provides proportional defense and has a solution for your platform that is important, but not expensive.

PRODUCT DESIGN APPROACH

We provide an end-to-end protection and monitoring solution for drones, fleets and critical infrastructure assets from GPS jamming attacks. This starts with antennas and ends with infiniCloud, which provides real-time information and statistics on each asset/endpoint via a cloud platform, placing critical data at the fingertips of critical asset managers.

Each asset is in turn protected by a self-contained full stack solution to defend that asset from malicious attacks. Our commercial and dual-use products are customized to address the real-time nature of the threats keeping in mind the cost, size, weight, and power requirements of the endpoint/asset.

At the core of the system is a proprietary and patented technology that is a combination of hardware (proprietary RFIC and electronics design) and software/algorithms. We are proud to offer a one of kind solution.

Our technology is built to protect GPS (GNSS) signals today from jamming, however it is extensible to address similar threats to Cellular, Wi-Fi, and other wireless signals that are easily jammed as well.

DISRUPTION AND DIFFERENTIATION
SWaP-C (Size, Weight, Power, and Cost)
The Company differentiates itself by significant SWaP-C advantages. No other anti-jamming solution offers this much protection in such a small, light, affordable, easily integrated and non-ITAR solution.

APPLICATIONS AND SAAS DATA STORE
Dual-use – GPSdome
With the intention of protecting small drones and UAVs, infiniDome categorized its first product, GPSdome, as a dual-use product. Meaning that with very minimal control by the Israeli Ministry of Economy, infiniDome can market and sell this product across the world. GPSdome will continue to be dedicated for dual-use customers and dual-use applications while supporting both civilian and government-only GNSS bands.

Commercial – OtoSphere
For protection vehicles and commercial networks, infiniDome launched OtoSphere in early 2020. OtoSphere is a strictly non-military product sold to non-military customers with non-airborne applications. It supports today and will support in the future only civilian GNSS bands.

GPS Security Cloud Option – infiniCloud
infiniCloud is the world's first GPS Security Cloud allowing to monitor any GPSdome or OtoSphere unit and multiple GPSensor units deployed where GPS is critical – be it highway/truck check points, critical infrastructure buildings, border passes etc. infiniCloud enables the continuous monitoring of GPS and cellular reception and enables an instantaneous alert when a jamming attack is detected ensuring continuous asset operation.

VERTICAL MARKET APPLICATIONS
The Company's target markets include mission critical segments that require a low-profile anti-jamming solution that ensures continuous asset operation and delivery of services.

UAV/UAS – Drones are increasingly under jamming attack, GPSdome protects drones on critical missions.
Fleet Management & Maritime – All fleets are susceptible to jamming, OtoSphere protects critical cargo.
Critical Infrastructure – 16 DHS sectors are mandated to protect PNT, GPSdome protects these critical assets.
Defense & Homeland Security – Military and police GPS assets need the jamming protection of GPSdome.
Autonomous Vehicles – GNSS is a critical enabler for autonomous capabilities, with OtoSphere, this autonomy is possible.

DISTRIBUTION
infiniDome leverages global relationships and collaboration with strategic customers and channel partners to address universal as well as regional application use cases worldwide.

MANAGEMENT

Omer Sharar, CEO	Ehud Sharar, President	Shaked Aviv, COO
Ben Sandford, VP Sales	Moshe Kaplan, CTO	Alex Katz, VP R&D