

## BeeHero launches 'HeroLink,' a solar-powered connectivity system for precision pollination infrastructure

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BeeHero, the global leader of data-driven precision pollination, has unveiled **HeroLink**, the solar-powered evolution of its critical gateway infrastructure, which aggregates and transmits BeeHero's in-field and in-hive sensor data to the cloud for AI-powered analysis. Currently scheduled for its first deployment across orchards during Australia's almond pollination season in July, HeroLink offers growers and beekeepers a more sustainable, longer-lasting solution for high-fidelity data collection across expansive orchards and transmission to the cloud—setting the stage for the next generation of scalable precision pollination.

Modern commercial agriculture is being transformed by precision technologies, many of which require stable internet connectivity to function effectively in the field. And yet, both in the USA and across the globe, limited connectivity in rural

areas persists, challenging the adoption of agricultural innovations. BeeHero overcomes this challenge with HeroLink, a robust, adaptable solution with the ability to deliver reliable, uninterrupted data collection even in remote, low-connectivity regions. Integrating an industry-first, multi-frequency internal cellular antenna capable of transmitting data even in areas with no reception, HeroLink enables the smooth function of the company's precision pollination technology in all farming environments.

A long-standing, critical component of BeeHero's precision pollination solutions, the HeroLink gateway unit aggregates data from a number of the company's proprietary in-field and in-hive IoT sensors, including key environmental information such as temperature, humidity, sound levels, and vibration. Each HeroLink unit then transmits this rich data set to the cloud in real time using an onboard cellular modem, enabling BeeHero's AI-driven analytics platform to generate early detection and actionable insights for growers and beekeepers.

The new HeroLink features a solar-powered, rechargeable architecture and the upgraded cellular antenna, dramatically improving connectivity and energy independence, extending the unit's lifecycle, reducing maintenance, and enabling large-scale, year-round deployment including in areas where traditional infrastructure falls short.

The first deployment of HeroLink units will take place during the Australian almond pollination season this upcoming July 2024, showcasing the solution's consistent, high-quality data collection in remote, low-connectivity regions like the country's expansive almond-growing areas. HeroLink represents the 5th generation of BeeHero's gateway infrastructure, with more than 100,000 BeeHero gateway units previously deployed across the US and Australia.

Omer Davidi, Co-Founder and CEO of BeeHero. "By combining solar power with vastly improved connectivity, we are eliminating barriers to scale and bringing data transparency to even the most remote corners of commercial farmland. In doing so, we are empowering growers and beekeepers to monitor more hives, more often, with fewer infrastructure limitations—continuing to make precision pollination more scalable and sustainable."

In addition to its value for sustainable agriculture practices, HeroLink introduces a significant architectural enhancement: the ability for a single gateway to support a much larger number of sensors. Each unit can now support an unlimited number of in-field and in-hive sensors, thanks to a new communication protocol that enables both extended range and sensor-to-sensor data relaying. This reduces installation complexity and costs while allowing for increased sensor density and frequency of data transmission. The result is a higher-resolution picture of pollination activity, hive health, and environmental conditions without the constraints of battery life.

HeroLink aligns with the goals of "The Global Million Hives Network," an initiative launched by BeeHero last month with the aim of creating the world's largest data-based project to monitor bee health. BeeHero's solar-powered design and ability to connect large numbers of sensors in remote areas is bolstering the initiative's goal of expanding global hive monitoring to safeguard pollinators and food security. As the largest precision pollination provider in the world, BeeHero currently monitors over 300,000 hives, collecting 25 million daily data samples.