

4/30/2026

Biome Delta and Quantified Sensor Technology

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Biome Delta has announced a distribution partnership with Quantified Sensor Technology to bring high-performance greenhouse sensors to North American growers. Through this partnership, Biome will supply growers with the FireFly node and a suite of sensors developed by Quantified specifically to monitor vine crop health.

Quantified Sensor Technology's product lineup adds a level of granularity that goes well beyond standard greenhouse sensing. Their system focuses on climate, irrigation, water use and plant growth. At the center is the FireFly hub, which wirelessly collects temperature, relative humidity and light intensity within the greenhouse. FireFly communicates with a central access point to send data to the cloud while also serving as a bridge for Quantified's additional sensors, which is where the system really starts to shine.

Those sensors include a Moisture and EC probe, a Smart Gutter and a Crop Weight Monitor. Together, these tools can trigger irrigation based on substrate moisture, measure drainage volume and EC, and track real-time changes in crop weight on the vine. The result is a detailed picture of how much water plants are actually using, how closely irrigation strategies match crop demand, and when crops may be approaching harvest readiness.

Viewed through the lens of the Plant Empowerment growing philosophy, this sensor suite feels almost like a cheat code. One of the three core pillars of Plant Empowerment is water balance, which goes beyond simply supplying water to fine-tuning water status within the plant and managing fruit load as a reservoir. Quantified's sensors provide direct, quantitative insight into nearly every component of water control for vine crops.

The next question on my mind is how do I do even less? Quantified's platform includes a robust API powered by InSight, enabling integration with control systems such as Priva, Source.ag and IIVO. With just a few crop cycles of data, these tools could support powerful monitoring and automation strategies aimed at improving yields while reducing water use and labor inputs. Details at biomedelta.com. **IG**

[The FireFly sensor node from Quantified Sensor Technology.](#)