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**FOR IMMEDIATE RELEASE**

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## **Anemoment Unveils New 3D Sonic Anemometer Engineered for UAS-based Atmospheric Flux and Turbulence Research**

*TriSonica™ Sphere Designed to Deliver More Precise Vertical Wind Measurements Coupled with Fast Sampling Rates*



**TriSonica™ Sphere  
Wind Flux Sensor**



**Atlanta, GA – (AUVSI XPONENTIAL, August 16, 2021)** – Anemoment LLC, (**Booth 2230**) a specialized meteorological instrument design firm located in Longmont, CO, announced today the release of its newest 3D sonic anemometer, the TriSonica™ Sphere Wind Flux Sensor (Figure 1). Engineered to deliver more precise vertical wind measurements, coupled with faster sampling rates (up to 50 Hz), the TriSonica Sphere is ideal for UAS-based atmospheric flux and turbulence research, including eddy covariance studies.



**Figure 1: TriSonica Sphere's patent-pending spherical implementation.**

Developed in conjunction with BlueHalo, a leading provider of advanced engineering solutions and technology to the national security community, the TriSonica Sphere was specifically engineered for deployment atop BlueHalo's Atmospheric Characterization Payload (WP-V3 ACP) UAS sensor suite (Figure 2). The WP-V3 ACP is a complete, customizable meteorological sensor suite for making low Earth atmospheric measurements from a wide array of UAS platforms.

"The TriSonica Sphere's unique spherical implementation (patent pending) dramatically reduces the effects of wind shadowing and increases the accuracy of vertical wind measurements," emphasizes

Stephen Osborn, Chief Technology Officer and Co-founder of Anemoment, LLC. "Our customers have been asking for a 3D sonic anemometer that can accurately measure atmospheric turbulence and flux measurements. The TriSonica Sphere not only delivers on those requirements but does so with a size and weight optimized for UAS deployments."



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**Figure 2: TriSonica Sphere Integrated with BlueHalo's Atmospheric Characterization Payload (left); attached to a DJI Matrice 600 (right)**

“Anemoment’s sensors have been our preferred sonic anemometer since we discovered their TriSonica Mini Wind and Weather Sensor,” states Alex Clark, Senior Engineer, BlueHalo. “The TriSonica Sphere retains the size and weight attributes we value for small

UAS implementations, while providing us true 3D measurements of refractive index structure—key to measuring wind turbulence.”

The TriSonica Sphere is available directly from Anemoment. Complete specifications and order inquiries can be facilitated on the company’s website: [anemoment.com](https://anemoment.com).

The Atmospheric Characterization Payload is available directly from BlueHalo. Complete specifications and details can be found at: <https://bluehalo.com/product/atmospheric-characterization-payload-wp-v2-acp/>

### **About Anemoment LLC**

Anemoment LLC is a specialized meteorological instrument design firm located in Longmont, CO. Anemoment is recognized for manufacturing the world’s smallest and lightest 3-dimensional ultrasonic anemometers. From the TriSonica Mini, which is small enough to fit in the palm of your hand, to the TriSonica Sphere, the most compact and accurate 3D sonic anemometer designed specifically for UAS-based atmospheric flux and turbulence research, Anemoment’s anemometers are recognized as highly accurate, powerful tools for anyone involved in atmospheric monitoring, weather reporting, turbulence calculations, and ecosystem research. Their size makes them well suited for portable, temporary deployments, while the fact they have no moving parts, thus eliminating maintenance issues, makes TriSonica sensors perfect for permanent installations. With its patented wave signal noise reduction technology, the TriSonica Mini and TriSonica Sphere give you the power to “Know the Wind.” More information can be found at [anemoment.com](https://anemoment.com).

### **About BlueHalo**

BlueHalo is purpose-built to provide industry-leading capabilities in the domains of Space Superiority and Directed Energy, Air and Missile Defense and Command, Control,



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Communications, Computers, Intelligence, Surveillance, and Reconnaissance (C4ISR), and Cyber and Intelligence. BlueHalo focuses on inspired engineering to develop, transition, and field next generation capabilities to solve the most complex challenges of our customer's critical missions and reestablish our national security posture in the near-peer contested arena. [www.bluehalo.com](http://www.bluehalo.com)

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