

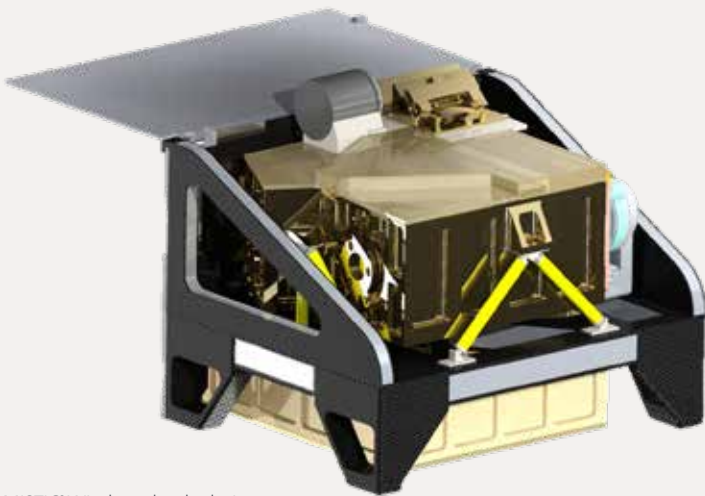
Midwave infrared sounder for
temperature and humidity in
a constellation for winds

MISTiC[®] Winds

baesystems.com/space

Utilizing state-of-the-art sensor technology to make critical atmospheric state and transport observations

MISTiC® Winds improves short-term weather forecasting with a miniature high-resolution, wide field, thermal spectrometry instrument. Its extraordinarily small size, low mass, and minimal cooling requirements can be accommodated aboard a small microsatellite. System observations improve weather predictions and support key economic decisions in the energy, air transport, and agricultural domains.



MISTiC® Winds payload solution

Key features and benefits

- High spatial temporal resolution temperature and humidity soundings support accurate weather predictions
- Small size, low mass, and minimal cooling requirements can be accommodated aboard a small micro-satellite for a low cost, low risk approach
- Low fabrication and launch costs enable a low-earth orbit sun-synchronous sounding constellation that provides frequent refresh rates and wind observations
- 3D wind observations allow for significant cost reductions of short-term weather forecasts

Applications

- Airlines and air traffic control awareness
- Natural disaster preparation
- Search and rescue planning
- Tropospheric wind observations
- Rapid refresh temperature/ humidity profiling observations
- Secondary transport observations for aerosol, cloud, ocean, ecosystem, and primary NASA missions

For more information contact:

BAE Systems

Greg Knapp

T: 571 364 6128

E: gregory.knapp@baesystems.us

W: baesystems.com

Cleared for open publication on 03/18

Disclaimer and copyright

BAE Systems reserves the right to restrict component sales based on application and volume. Please contact the factory for more information.

This document gives only a general description of the product(s) and service(s) and, except where expressly provided otherwise, shall not form any part of any contract. From time to time, changes may be made in the products or the conditions of supply.

Patented and patents-pending

BAE SYSTEMS is a registered trademark of BAE Systems plc.

©2025 BAE Systems. All rights reserved.

CS-18-A84-001