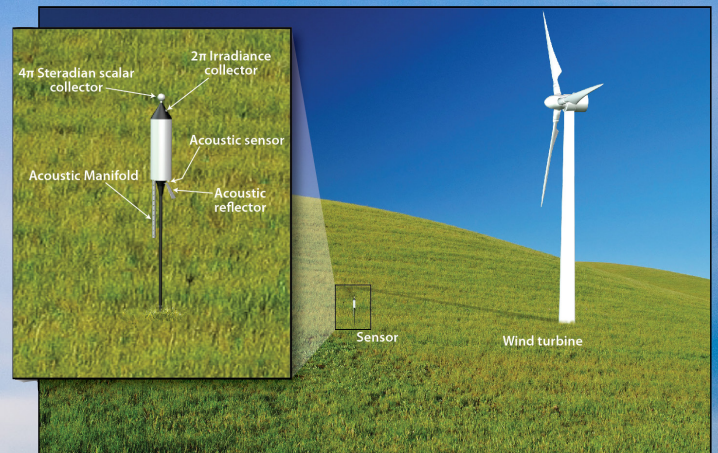


Woods Hole Oceanographic Institution

MULTIMODAL TURBINE MONITOR "MIME"

U.S. Patent No. 9,395,338



MAXIMIZED ENERGY PRODUCTION

- Control functionality allows for optimized use based on environmental feedback

LOW-MAINTENANCE & WEATHER TOLERANT

- Easy service and repairs
- Built for permanent installation in all weather conditions

PORTABLE

- For both permanent installation & temporary use

HIGHLY ACCURATE

- Improved highly-accurate sensor package
- Offering 4 simultaneous time-stamped readings

Overview: Outdoor installation of wind turbines can generate noise, vibrations, and light or shadows (flicker). Available technologies to assess impact tend to be uni-modal, handheld, weather-intolerant, and unable to take persistent, calibrated, time-stamped readings. Additionally, these technologies don't offer instantaneous turbine control and performance optimization based on environmental feedback.

Technology: The Multi-modal Environmental Impact Monitor (MIME) evaluates simultaneous moment-to-moment impact and offers the capability for feedback control of equipment based on environmental conditions. A fully integrated solid state sensor package for temporary or permanent field installation, this sturdy, all-weather instrument package simultaneously and continuously measures ground-coupled vibration, optical changes (shadow and flicker), and low frequency (infrasonic) acoustic emissions. MIME incorporates a control functionality, utilizing its precise measurements to optimize turbine performance and energy output. Each unit has onboard data storage capability, USB output, and networking capability. Data is recorded in a uniform and traceable monitoring protocol for the production of a reliable standardized data set.



WHOITechTransfer

WWW.TECHTRANSFER.WHOI.EDU