

WINDSCEPTOR®

V4 Laser Wind and Range Sensor



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Performance Specifications

Range Measurement (User selectable units: feet, meters, or yards.)	20 m to 8,000 m
Range Measurement Accuracy	± 1 m
Wind Measurement (User selectable units: mph, m/s, or knots.)	6 Range Gates Between 300 m to 1000 m Headwind and Crosswind
Wind Speed Bounds	-25 m/s to 25 m/s
Wind Measurement Accuracy	± 1 m/s
Measurement Time	1 sec
Eye-Safety	Class 1M Eye-Safe
Battery Life (rechargeable)	1,000 shots USB Power (Option)
Data Output	Bluetooth/USB, ATAK Cursor on Target

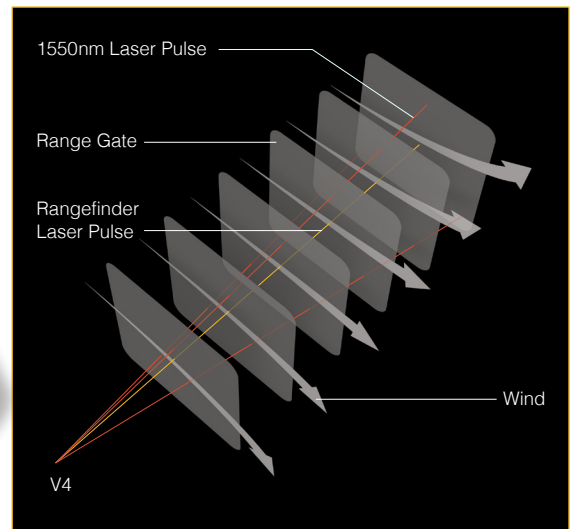
General Specifications

System Dimensions	18" L x 4.5" D
Total Weight	8 lbs.
Water Protection	IP67 Compliant
Operating Temperature	-20°C to 50°C
Storage Temperature	-40°C to 85°C

Additional Features

- Tripod Mount Interface
- Pan-Tilt Option
- Push Button/Continuous Mode
- Inclinometer for slope analysis

How V4 works



Fiber-optic day/night laser wind sensor and rangefinder

The V4 laser wind and range sensor is an integrated optical device that remotely measures wind speed and direction as well as range-to-target. Weighing only 8 lbs., the device is easily set up, and also includes an integrated tripod mount. Its performance has been validated by the US Army Picatinny Arsenal. The device works in either single-shot or continuous mode. There is integrated GPS/IMU, and offers Bluetooth data output. The unit uses a rechargeable battery.

The V4 fires a series of 1550nm eye-safe laser pulses into the atmosphere. As the laser pulses travel through the air, a small fraction of the laser light is reflected back from microscopic dust particles naturally entrained in the air. The sensor detects this reflected light and computes the speed and direction of travel of these dust particles (and consequently the speed and direction of the three-dimensional wind) using the Doppler Principle.