



Tempest Laser Wind and Range Sensor



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 50 m to 500 m Headwind and Crosswind
Wind Speed Bounds	-25 m/s to 25 m/s
Wind Measurement Accuracy	± 1 m/s
Measurement Time	1 sec
Targeting/Sighting Optic	7X
Eye-Safety	Class 1M Eye-Safe
Battery Life (rechargeable)	1,000 shots USB Power (Option)
Data Output	Bluetooth/USB, ATAK Cursor on Target

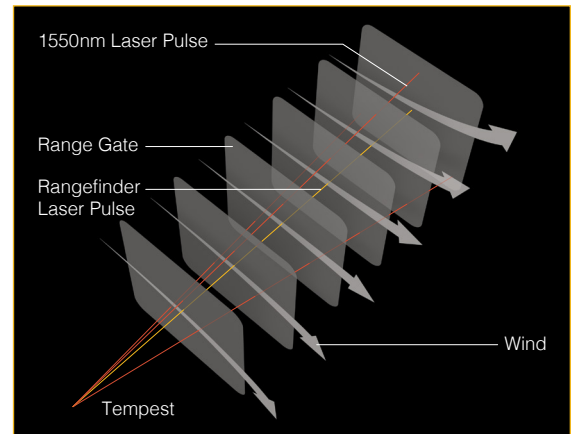
General Specifications

System Dimensions	9" x 6.5" x 3"
Total Weight	3.25 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
- Neck Strap
- Push Button/Continuous Mode
- Inclinator for slope analysis

How Tempest works



Handheld day/night laser wind sensor and rangefinder

The Tempest laser wind and range sensor is the only hand-held device to remotely measure wind speed and direction as well as range-to-target. Weighing only 3.25 lbs., the Tempest is comfortably hand-held in any situation and offers an integrated tripod mount. The US Army Picatinny Arsenal has validated its performance. The Tempest works in either single-shot or continuous mode. There is integrated GPS/IMU, and it offers Bluetooth and cursor-on-target data output. The unit uses an internal rechargeable battery.

The Tempest 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.