



Ares Fire and Safety Systems LLC

The only Wearable LWS that can  
detect and identify

# TACTICAL WEARABLE LASER WARNING SYSTEM TWL-200



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Made In USA



# TACTICAL WEARABLE LASER WARNING SYSTEM

- In an ever-evolving landscape of modern warfare and security challenges, the TWL200 Wearable Laser Warning System stands as a pinnacle of innovation, designed to ensure the safety and effectiveness of military personnel in laser-threat environments. This advanced system offers real-time laser detection, directional alerts, and a suite of cutting-edge features that empower users with unmatched situational awareness. In this document, we provide comprehensive details on the specifications and performance metrics that make the TWL-200 an indispensable asset for military operations.

## Laser Detection

- **Response Time:** < 200 milliseconds.
- **Wavelength Coverage:** 700 to 1700 nanometers.
- **Pulse Repetition Frequency (PRF) Detection:** DC to 1 Mhz.
- **Minimum Detectable Energy:** 500 microwatts per square centimeter.

## Laser Types and Corresponding Wavelengths

**Guidance Lasers:** The TWL-200 can detect various guidance lasers used in military applications, including:

- 532 nanometers (green laser)
- 1064 nanometers
- 1300 nanometers
- 1550 nanometers

## Range-Finding Lasers

The system is capable of identifying range-finding lasers operating within the wavelength range of 700 to 1700 nanometers.

## Physical Dimensions

- Width: 58±2 mm(2.28 inches)
- Height: 44±2 mm (1.73 inches)
- Length: 97±2 mm (3.82 inches)
- Weight: 220 grams (0.49 lb)

## Key Performance Metrics

### Detection Sensitivity

- Rapid detection of laser threats, including guidance or range-finding lasers.
- Accurate identification of laser sources with minimal false alarms.

### Directional Alerts

- Real-time audio and/or vibration alerts indicating threat location (e.g., "threat detected on far-left side").
- Enhanced situational awareness for immediate response.

### Battery Efficiency

- Up to 24 hours of continuous operation, reducing the need for frequent recharging.
- Power-efficient design or prolonged field use.

### Integration and Compatibility

- Seamless integration with existing military headgear.
- Advanced Friendly and Foe Detection Algorithms.
- Incorporates algorithms for differentiating between friendly and hostile laser sources.
- Utilizes PRF passcodes to enhance identification and security.

### Security Measures

- Enemy-disabling function safeguards sensitive technology from potential misuse.

## Power and Battery

- **Power Source:** Rechargeable built-in battery.
- **Dimension:** 140 grams(0.31 lb)
- **Continuous Operation:** Up to 24 hours.

## Field of View

- **Horizontal Field of View:** Up to 220°.
- **Vertical Field of View:** Up to 110°.
- **Azimuth Detection:** Up to 360°.

## Environmental Resilience

- **Ingress Protection Rating:** IP69K (Submersible).
- **Drop Resistance:** Up to 2 meters (6.56 feet).

## Audio and Vibration Modes

### Adjustable Volume Levels

- Low: 80 dBA
- Medium: 90 dBA
- High: 105 dBA

**Mode Options:** Sound mode, vibration mode, and sound and vibration modes together.

## Log Capability

- **Log Storage:** Up to 500 detections.

## Long Battery Life

Extended battery life allows for continuous operation without frequent recharging.

