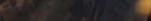
Ares Fire and Safety Systems LLC



# The only Wearable LWS that can detect and identify

# TACTICAL WEARABLE LASER WARNING SYSTEM TWL-200







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# TACTICAL WEARABLE LASER WARNING SYSTEM

- AFSS
- 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).

30<sub>MM</sub>

• 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

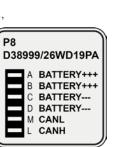
**Mode Options**: Sound mode, vibration mode, and sound and vibration modes together.

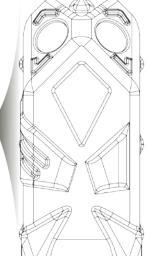
# Log Capability

• Log Storage: Up to 500 detections.

Long Battery Life Extended battery life allows for continuous operation without frequent recharging.

136,8мм





136,8мм



01.06.2023 REV3/CODE: AFSS-INF-101/ARESFSS