

Patented by The Fire Knight Pty Ltd
International Patent Application No. PCT/AU2023/050224

# **Revolutionizing Wildfire Protection**

Wildfires pose significant threats to lives, property, and the environment. The Guardian system is an innovative solution designed to autonomously detect, alert, and assist in mitigating wildfires with precision and reliability.





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# **Key Features**

## **Autonomous Activation:**

Equipped with advanced sensors and nozzles that automatically detect and respond to fires, enabling rapid suppression without manual intervention.

## **Live Video Monitoring:**

Real-time video feeds allows users to assess threats and monitor the situation remotely.

## **Seamless Connectivity:**

Wi-Fi, GSM, or satellite connectivity ensures uninterrupted communication for system alerts and monitoring.

Options for direct communication with users or a 24-hour command center.



# Smart Notifications Stay informed with instant alerts for:

Fire Alert: Immediate notification when a fire is detected to ensure rapid response.

**Battery Levels:** Ensures uninterrupted operation.

**Tamper Detection:** Prevents unauthorized access.

**Maintenance Reminders:** Keeps systems in peak condition.

Orientation Disturbances: Detects shifting or tilting.

Water Levels: Monitors fluid capacity for readiness.





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## **Built for Rugged Conditions**

## **Eco-Friendly Suppressants**

While the choice of suppressant is at the user's discretion, we recommend non-toxic, eco-friendly water-based fluids to align with sustainability goals.

#### **Industrial Durability**

Solar-powered batteries and robust materials ensure up to 5 years of reliable, low-maintenance operation, even in harsh environments.

## **Comprehensive Coverage**

Each unit covers a 60 meter diameter. Deploy units in circular or linear patterns to protect critical zones with 360-degree precision.



#### **Available Sizes**

The Guardian system is available in three standard tank capacities to suit various fire suppression needs:

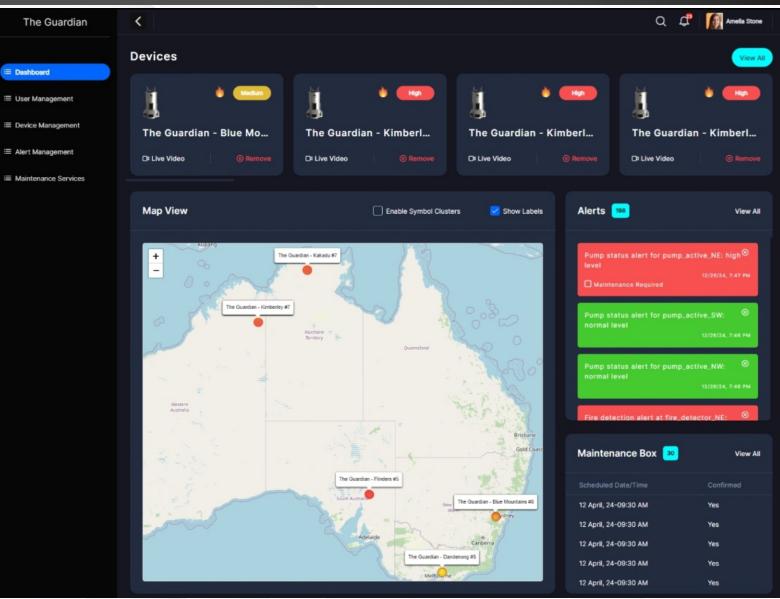
- 1,000 Litres Compact and ideal for smaller properties or targeted protection.
- 2,000 Litres A versatile option for medium-sized areas.
- 3,000 Litres Best suited for large-scale applications or high-risk zones.

This range ensures flexibility for different environments, making the Guardian adaptable to both residential and industrial use.

Additionally, it can be tailored to meet specific requirements, offering fully customizable tank sizes to suit diverse needs and deployment strategies.



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#### **User-Friendly Interface**

The Guardian system includes an intuitive software platform accessible on both desktop and mobile devices.

With this system, users can:

- Monitor live video streams.
- Receive instant notifications and alerts.

The Guardian ensures seamless communication, even when in remote locations, by operating via Wi-Fi, GSM, or satellite connectivity.

It can communicate directly with the user or, if selected, a 24-hour command center for continuous monitoring. Users also have the option to manually activate any system, giving them full control over suppression actions whenever necessary.

#### Customizable Alerts

Set preferences for notifications, including which stakeholders or emergency services should be contacted during a fire event.

## **Data Insights**

The software logs system activity, including fire detection, suppressant deployment, and maintenance alerts. These records can assist in post-event analysis and compliance reporting.



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#### **How It Works**

#### 1. Detection:

Infrared cameras identify early fire signatures.

#### 2. Alert:

Real-time notifications are sent to users and monitoring systems.

#### 3. Suppression:

The system deploys suppressant fluid precisely to help contain the fire.

#### 4. Monitoring:

Continuous video feeds ensure ongoing situational awareness.

## **Applications**

The Guardian system is purpose-built for outdoor environments, making it ideal for:

- Communication Towers
- Power Transmission Lines
- Residential and Commercial Properties in Wildfire-Prone Areas
- National Parks and Forests
- Critical Infrastructure Sites

## **Certifications and Approvals**

## Global Compliance:

The system and its components are designed, manufactured, and certified to meet internationally reorganized safety, engineering, and quality standards.

#### **Manufacturing Excellence:**

All components are sourced from trusted manufacturers in the United States and Europe, ensuring adherence to the highest global standards for reliability and performance.

#### **Component Approvals:**

Integrated components are rigorously tested and certified for functionality, environmental durability, and structural integrity, guaranteeing optimal safety and performance in all conditions.

**Disclaimer:** The Fire Knight systems are designed as fire suppression aids and are not classified as fire extinguishers. These systems assist in the detection, alerting, and suppression of fires to minimize damage and provide additional response time. While they are engineered to suppress fires effectively, they may not fully extinguish all fire types or scenarios. Users should always follow local fire safety regulations and ensure appropriate fire protection measures are in place. Provides early detection to alert emergency services promptly, ensuring they can respond as quickly as possible.