



# THE GUARDIAN – AUTOMATED WILDFIRE DEFENSE

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.



Contact us for more details or visit our website at [www.thefireknight.com](http://www.thefireknight.com)



# THE GUARDIAN – AUTOMATED WILDFIRE DEFENSE

Patented by The Fire Knight Pty Ltd

International Patent Application No. PCT/AU2023/050224

## 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.



Contact us for more details or visit our website at [www.thefireknight.com](http://www.thefireknight.com)



# THE GUARDIAN – AUTOMATED WILDFIRE DEFENSE

Patented by The Fire Knight Pty Ltd

International Patent Application No. PCT/AU2023/050224

## 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.



Contact us for more details or visit our website at [www.thefireknight.com](http://www.thefireknight.com)



# THE GUARDIAN – AUTOMATED WILDFIRE DEFENSE

Patented by The Fire Knight Pty Ltd

International Patent Application No. PCT/AU2023/050224

The screenshot displays the 'The Guardian' software interface. On the left is a navigation menu with options: Dashboard, User Management, Device Management, Alert Management, and Maintenance Services. The main area is divided into several sections:

- Devices:** A row of four device cards. The first is 'The Guardian - Blue Mo...' with a 'Medium' status. The other three are 'The Guardian - Kimberl...' with 'High' status. Each card includes a 'Live Video' icon and a 'Remove' button.
- Map View:** A map of Australia with several red location markers. Labels include 'The Guardian - Kakadu #7', 'The Guardian - Kimberley #7', 'The Guardian - Flinders #5', 'The Guardian - Blue Mountains #5', and 'The Guardian - Dandenong #5'. The map also shows state boundaries and major cities like Melbourne, Adelaide, Canberra, Sydney, Brisbane, and Gold Coast.
- Alerts:** A box showing 196 alerts. It lists three pump status alerts (one high, two normal) and one fire detection alert, all dated 12/26/24.
- Maintenance Box:** A box showing 30 maintenance items. It contains a table with columns for 'Scheduled Date/Time' and 'Confirmed'.

Scheduled Date/Time	Confirmed
12 April, 24-09:30 AM	Yes

## 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.



# THE GUARDIAN – AUTOMATED WILDFIRE DEFENSE

Patented by The Fire Knight Pty Ltd

International Patent Application No. PCT/AU2023/050224



## 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.

Contact us for more details or visit our website at [www.thefireknight.com](http://www.thefireknight.com)