A Solution for the Forest Department

Prevention of Human Animal conflict

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Forrest Pole Camera

PreEmptor

Product Overview

Innovative monitoring solutions are essential for balancing forest ecosystems, promoting human-wildlife coexistence, and preserving the environment.

Designed with a commitment to carbon neutrality, Eco-friendly pole cameras, designed to blend into the natural landscape and operate sustainably with solar energy, capture real-time data and high-definition imagery.

These devices help conservationists and authorities make informed decisions, mitigate human-wildlife conflicts, and safeguard biodiversity, enhancing forest security and protecting our natural heritage

Product Solution / System

Forrest Pole Camera System





Thermal Camera







RADAR Unit

Visible Al Camera

Audio Unit

Features & Benefits

Delivering a robust & Intelligent solution

Our Al-driven system offers comprehensive coverage with resilient edge processing, multiple sensors, and a low-power network. It features software-driven configuration, robust hardware, minimal intrusion, and is easy to deploy and maintain.

Detection Range.

Detects, recognizes, and identifies threats from 10 m to 2000 m. animals, people, and vehicles 24/7 in all weather, even through thick foliage and poor visibility, using multiple sensors across various spectra.

Edge Intelligence

Operates independently without the need for constant central server connectivity, ensuring uninterrupted surveillance.

High Redundancy

Ensures uninterrupted functionality even in the event of component failures, maximizing reliability.

🔁 Innovative Design

Facilitates easy installation, maintenance, and robust performance, reducing operational hassles.

3 Battery Backup

Integrated battery backup ensures continuous operation during power outages, maintaining surveillance integrity.

Multi-sensor Fusion

Integrates various sensors for enhanced situational awareness, improving threat detection accuracy

() 360-Degree Coverage with Twin Rotating Cameras

Provides complete coverage with twin sets for redundancy, ensuring no blind spots in surveillance.

Software-Defined Camera Control

Allows precise adjustments for optimal monitoring, enhancing surveillance efficiency.

Rnimal-Friendly Communication

Utilizes an MHz-based communication network to minimize disruption to wildlife habitats, promoting environmental stewardship.

o Dual-Purpose Camera Poles

Camera poles also serve as network towers, reducing forest disruption and simplifying infrastructure deployment.



360 Degree Twin Rotating Camera



Forrest Pole Camera

PreEmptor

Our pole cameras provide continuous, eco-friendly surveillance to protect forests and ensure harmonious human-wildlife coexistence 24/7

🖺 135 Kg

Certifications

610mm x 7620mm x 610mm
IP, IEC, BSI, IK, FCC, CE

4 120W, 24V, 5A

Hardware Specs	
Multi Sensor Array: Visible + NIR + mm Radar + Thermal	Dedicated cooling and ventilation systems
All in one package for harsh environment deploymen	8 x 8MP CMOS Sensor
Inbuilt compute with option for M2	DC12V Power in RJ45 Out
Internal storage (expandable)	HDR/WDR · AE/AF/AWB
Color in day / Mono at night	In-built Pulsed IR Illuminator
IP68 within IP65 works in all harsh environment	Synchronised VIS Cut Filters
Integrated 4G / 5G modem	Custom technology to prevent obstruction of lens
Firmware/Middleware integrated	Industry standard interface
IP Camera with multiple streams	FHD at 60 fps/30 fps

⋄ Software Specs

Inference & Interpretation

 ${\sf Pipeline} \cdot {\sf Fusion} \cdot {\sf Domain} \ {\sf correction}$

Interaction & Action

 ${\sf Operator} \cdot {\sf Device} \cdot {\sf Triggered} \; {\sf standard} \cdot {\sf Triggered} \; {\sf SLM} \; {\sf Gen} \; {\sf A}$

Information & Ingestion

Live Streaming • Full Recording • Synopsis • Side-loading • Uploading • Mesh-loading

Insights & Improvement

Dashboard · Ai led descriptors · GenAl driven search

C++ with libraries · Java with frameworks · Hardened Linux · Al Module for detecting specific defetcts

Updated Al Module

People, vehicle, objects, animals, and scene related Ai modules

Intelligent Detection

Detect and classify animals in Thermal and Visible spectrum

A Robust Animal Detection & Notification Solution

Our Products are driven by the best technology available in the Industry

01

Animal detection and recognition in Thermal and Visible and Visible + IR mode.

02

Alert nearby villages on presence of elephants / big cats in marked danger zones.

03

Camera differed live streams along with event and alert artefacts are made available in the Control Center for view and analysis.

04

Self healing and self diagnosing system, make it a robust solution offer

Deployment Plan

