



inca
Intelligent Fire Safety

A LIVING LAYER
OF PROTECTION



INCA SENTINEL

Thermal Fire Detection Unit

Fixed, standalone, or rover-mounted —
one unit, every watch.



DETECT

Continuously scans for
thermal signatures of fire



ALERT

Instantly notifies WFS tactical
command map with live view



INTEGRATE

Works with the full INCA
communications stack



BUILT TO ENDURE

Rugged stainless steel housing
for year-round, unattended
outdoor service



POST-FIRE WATCH
CONTINUOUS THERMAL
SURVEILLANCE



STANDALONE
EARLY WARNING
DETECTOR



ROVER-MOUNTED
MOBILE
DETECTOR



CELLULAR, MESH
OR LoRa LONG-RANGE
CONNECTIVITY



RUGGED, RELIABLE
AND BUILT FOR
THE OUTDOORS

INCA Sentinel™ and WFS net®
Working together for a safer future.

WFS net®
FIRE PROTECTION BARRIER

INCA SENTINEL

Thermal Fire Detection Unit

Fixed, standalone, or rover-mounted — one unit, every watch.

Overview

The INCA Sentinel is a self-contained thermal fire detection unit built around the same INCA Brain intelligence that powers our rovers and drones. It combines a thermal camera — selected and tailored to the customer's detection range, resolution, and budget requirements — with a motorised pan/tilt platform, on-board computing, and communications hardware, all enclosed in a rugged stainless steel housing built for years of unattended outdoor service.

The Sentinel continuously sweeps its surroundings, scanning for thermal signatures of fire. The moment a heat source is detected, it alerts the WFS tactical command map with the position and a live view, so an operator can verify instantly and dispatch resources with confidence. Like every Brain-equipped asset, it uses the full INCA communications stack — cellular where available, and mesh or long-range LoRa radio where it is not.

One Unit, Three Deployments

Post-Fire Watch

The hours and days after a fire is contained are among the most dangerous — buried embers and hidden hotspots can reignite long after crews have left. Mounted on a pole overlooking the burn area, the Sentinel keeps a continuous thermal watch over the scene and alerts command the moment any hotspot flares up, freeing crews for active duties instead of prolonged manual fire watch.

Standalone Fire Detector

Placed at a vantage point over fire-prone terrain — a forest boundary, an industrial site, a plantation, a waste facility — the Sentinel operates as a permanent early-warning station. Its panning thermal view covers a wide area from a single mast, detecting new fires at the earliest stage, when a single rover or drone response can still stop them.

Rover-Mounted Mobile Detector

Mounted on the INCA fire patrol rover, the Sentinel becomes a mobile detector serving both roles on demand. The rover patrols wide areas with the Sentinel scanning as it moves, or parks it as a temporary watchtower over a fresh burn scar — then simply drives to the next assignment. No installation, no fixed infrastructure, redeployed in minutes.

Inside the Unit

Thermal camera — specified per customer: detection range, resolution, and lens are matched to the terrain and required coverage.

Pan/tilt platform — motorised sweep for wide-area coverage from a single point, with remote pointing from the WFS map for operator-directed inspection.

INCA Brain — on-board computing for detection and analysis, plus the full communications stack and native WFS integration.

Stainless steel housing — corrosion-resistant, weatherproof enclosure engineered for harsh, unattended outdoor deployment.

INCA AB

Adaptive intelligence. Any hardware. Any mission.



inca | **WFS**®