

# Detect Fire, Flood, and Heat in Minutes.

Horizon adds six environmental and thermal monitoring capabilities to the Nova power backbone, compressing detection time for the highest-severity loss events from hours to minutes. Smoke, flood, temperature, humidity, battery thermal, and HVAC telemetry work together to turn a potential total-loss event into a recoverable one — and qualify the site for insurance premium credits.

**\$50K–\$500K+**

Range of fire-loss exposure at unmanned cell sites — equipment fires routinely escalate to total shelter loss.

**3–4x**

Greater fire damage at unstaffed vs. staffed sites, due to delayed detection (NFPA / industry data).

**\$150K–\$500K+**

Replacement cost of a fully equipped cell shelter after water intrusion or sustained over-temperature damage.

**FROM NOVA** Generator Health · Fuel Level & Theft · Battery String · Commercial Power · Auto-Transfer Switch · 24/7 NOC Support

## WHAT HORIZON ADDS

- 1 Smoke Detection**  
Real-time smoke and abnormal temperature-rise alerting via ceiling-mounted sensors inside the shelter. Alarm triggers the moment particulates exceed threshold — not after a human notices smoke on their next site visit. The control that turns a \$50K equipment loss into a recoverable event rather than a \$500K total shelter loss.
- 2 Flood Sensors**  
Floor-level water detection triggers an alarm before water reaches equipment racks or battery cabinets. Particularly critical at vault sites, coastal locations, and low-lying shelters. Converts a potential total-loss event into a remediation event with hours of response window rather than minutes.
- 3 Temperature & Humidity**  
Continuous ambient monitoring with configurable high/low thresholds for both temperature and humidity. High temp indicates HVAC failure or overload; low humidity signals ESD risk; high humidity signals condensation risk on electronics. Both are leading indicators of battery thermal stress and rectifier degradation.
- 4 HVAC Control**  
Remote HVAC telemetry and control via the OMNI360 dashboard — adjust setpoints, cycle the unit, verify compressor operation, and confirm cooling is active before thermal damage occurs. Prevents the class of HVAC fault that runs undetected for days at unmanned sites, causing battery and rectifier damage on arrival.
- 5 Battery String Thermal**  
Dedicated temperature sensors on battery strings and cabinets catch thermal stress and early thermal-runaway signatures long before visible smoke or flame. Battery thermal events are the leading cause of cell shelter fires — and early detection is the difference between a battery replacement and a total shelter replacement.
- 6 24/7 NOC Proactive Support**  
All environmental alarms are triaged by the Omnimetrix NOC — distinguishing nuisance alarms (condensation on startup, brief humidity spike) from events requiring immediate dispatch. Fire, flood, and thermal alarms are escalated without waiting for the next scheduled site visit or daily report review.

## WHY DETECTION TIME DRIVES THE LOSS NUMBER

At a staffed facility, smoke or water is noticed in seconds. At an unmanned remote shelter, the same event runs for hours — and that is the entire reason a \$50K equipment fire becomes a \$500K shelter loss. Horizon compresses the detection window to minutes by sending the alarm directly to operations the moment the sensor activates.

*Disclaimer: Equipment configuration may differ per site based on assessment. Installation costs are billed separately following installation.*

## RISK → VALUE MAPPING

Risk Category	Annual Exposure	How Horizon Addresses It
Fire (unmanned shelter)	<b>\$50,000 – \$500,000+</b>	Smoke detection plus battery string thermal sensors compress detection time from hours to minutes — the difference between equipment loss and total shelter loss. Both sensor types are required to catch the two most common ignition sources.
Water intrusion	<b>\$150,000 – \$500,000+</b>	Floor-level flood sensors trigger before water reaches equipment racks, converting a potential total loss into a manageable pump-and-dry remediation event. Recognized mitigating factor for commercial inland-marine policies.
HVAC / thermal damage	<b>\$15,000 – \$100,000+</b>	Temperature, humidity, and HVAC telemetry allow remote intervention before sustained heat or humidity damages batteries, rectifiers, and active radio units. Remote HVAC control eliminates the delayed-discovery fault class entirely.
Power-side risks (Nova)	<b>\$5,000 – \$40,000 / event</b>	Full Nova-tier coverage — generator health, fuel, battery string, commercial power, and ATS monitoring — is included in every Horizon deployment at no additional site cost.

### INSURANCE IMPACT — EQUIPMENT BREAKDOWN & PROPERTY

Verified remote environmental monitoring is a documented qualifying factor for P&C premium credits with most major commercial property underwriters. FM Global and similar carriers recognize continuous flood and smoke monitoring as risk mitigants under inland-marine and equipment-breakdown lines. Alarm logs accelerate claims processing and support subrogation. For a \$500,000 annual cell-site portfolio premium, a 10% credit is \$50,000 in annual savings.

## WHO HORIZON IS FOR

Horizon is the right tier for any site where loss exposure is dominated by environmental events — fire, flood, or thermal damage — or where an insurance underwriter has flagged equipment-breakdown or property risk. It stacks on Nova and is the natural step up for portfolios standardizing on a higher resilience baseline.

### High-Value Shelters

Fully equipped shelters where total replacement cost exceeds \$250K — environmental monitoring is the difference between a contained event and a total loss.

### Flood-Prone Locations

Coastal, low-lying, or vault sites where water intrusion is a known and underwriter-flagged exposure.

### Insurance-Driven Standards

Operators whose property or equipment-breakdown carriers require — or credit — verified environmental monitoring.

**Compress detection time. Protect every shelter.**

Contact Omnimetrix sales · [omnimetrix.net](http://omnimetrix.net) · Ask about OMNI360 Horizon for your portfolio.

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