

“Mitigating Risk. Protecting Investment. Pioneering Safety.”

THE CRITICAL FIRE RISKS IN SOLAR INSTALLATIONS

Our system is engineered to address the most common fire risks, as identified by leading international authorities (NFPA, ISE, UL, IEA, SAPVIA):

- 1. Improper Installation & Workmanship:** The #1 cause. Faulty MC4 connectors, incorrect torque, and poor cable management create high-resistance points that overheat.
- 2. Inverter/Charger Failure:** A potential ignition source for electrical fires.
- 3. BESS Failure (External Trigger):** Overcharging, external shorts, or overheating causing a battery incident.
- 4. BESS Failure (Internal Origin):** A rare but severe internal cell short circuit.

OUR PATENTED PHILOSOPHY IS SIMPLE

Detect Early, Isolate Instantly, Suppress Effectively.

RISK	I-CAT MITIGATION STRATEGY
All Electrical Risks (Faulty Connectors, Cabling, Enclosures)	Instant DC Isolation: DC isolation devices, isolate a number or all string, cutting power at the source, eliminating electrocution risk and stopping the fire's energy supply. Targeted Suppression: Our I-Protect® DLP gas systems in all enclosures (combiner boxes, inverters, etc.) suppresses fires at their origin.
Cable & Panel Fires	Early Detection: Linear Heat Detection Cables (LHDC) in all cable trays and under solar panels provide the earliest possible warning of overheating or flame ignition.
Battery (BESS) Fires	Comprehensive Protection: A dedicated Clean Agent Gas or Water Mist Total Flooding system protects the battery room, controlling the most challenging fires.
All Risks	Unified Intelligence: All detection and isolation devices are interlinked through a central Fire Alarm Control Panel and or IoT devices, providing real-time alerts and enabling manual override for ultimate safety and control.



I-CAT. DON'T JUST DETECT DANGER. NEUTRALIZE IT!

OUR WORKING PHILOSOPHY: INTEGRATED PROTECTION

The I-CAT System is a holistic ecosystem designed to work in unison:

1. **ISOLATE:** De-energize the DC side instantly with automatic and manual string isolation, ensuring firefighter safety.
2. **DETECT:** Identify thermal events at the very beginning with Linear Heat Detection cables in high-risk zones (cable trays, under panels).
3. **SUPPRESS:** Deploy the correct suppressant directly onto the fire source, low-pressure gas in enclosures, total flooding in battery rooms.
4. **ALERT:** Notify personnel immediately via connected IoT and fire alarm systems for rapid response.



Contact us *Today* for a safer *Tomorrow*.

I-CAT IS A



ISO
9001:2015
MANAGEMENT
SYSTEM

COMPANY