Photovoltaic Array Overheat & Fire Detection



- Early Photovoltaic-Fire Detection
- Designed to Perform, Proven to Deliver
- Fully EN54-28:2015+A1:2020 Approved
- UL 521 Listed Heat-Automatic Fire Detector
- Highly Scalable & Seamless System Integration
- Low Installation Costs & Minimum Effort Versus Conventional Alternative Technologies

The Complete Solution, Designed to Perform, Proven to Deliver



Enhance Your Solar PV Safety with ProReact Linear Heat Detection

As solar energy continues to rise in popularity, ensuring the safety of photovoltaic (PV) systems is more critical than ever. Solar PV installations, whether on rooftops, integrated into buildings, or in ground-mounted arrays, carry inherent fire risks.

Defective panels, overheated cables, or faulty plugs can lead to system failures, reduced efficiency, or even electrical fires. This is especially concerning in high-value environments like data centres, where rooftop fires can cause significant damage and financial loss.

Common PV Fire Safety Risks

- Wiring and Electrical Failures: Poor installation, damaged cables, or loose connections can lead to arcing, short circuits, and overheating
- Inverter Malfunctions: Inverters, responsible for converting DC electricity to AC, can become ignition points if they overheat or operate with faults
- Battery Storage Systems: Batteries can experience thermal runaway, electrical shorts, or electrolyte leakage
- Overheating and Panel Hotspots: Dust, debris, or shading that disrupts panel performance can cause localised temperature spikes
- Environmental Factors: Extreme heat, lightning storms, and vegetation debris can increase the risk of external ignition

Introducing ProReact Linear Heat Detection (LHD)

Thermocable's ProReact Temperature Sensing LHD systems are engineered to meet the unique fire detection challenges of solar panel installations. These systems provide reliable protection across the entire photovoltaic array, including associated cabling, inverters, and battery storage systems. Proven in a pioneering independent study, ProReact LHD systems detect early overheating and fire risks in real-world solar PV applications.

Why Choose ProReact LHD?

- Rapid Detection: In tests, ProReact LHD systems consistently detected fires within seconds to under one minute, with the fastest response in just 11 seconds
- Comprehensive Coverage: Each detection zone can cover up to 3,000 metres, making it adaptable for both compact and large-scale PV installations
- Seamless System Integration: The system integrates easily with conventional and addressable fire alarm control panels, ensuring compatibility with existing fire safety infrastructure
- Certified Reliability: ProReact LHD systems meet a wide array of international safety and performance standards, including EN54-28, VdS, CE marking, FM Approval, and UL 521 certification

Protect Your Investment with ProReact LHD

Ensure the safety and efficiency of your solar PV installations with Thermocable's ProReact Linear Heat Detection systems. With proven performance, comprehensive coverage, and seamless integration, ProReact LHD is the smart choice for safeguarding your solar energy investments.

Find Out More

For more information on ProReact Linear Heat Detection, including detailed installation guidance, please contact our Business Development Manager, Spike Armstrong, at spike.armstrong@thermocable.com

We are here to help you protect your solar PV investments with the best fire detection solutions available.





