

# Frequently Asked Questions | VESDA and Li-ion Tamer Protecting Gigafactories



# Frequently Asked Questions

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## VESDA and Li-ion Tamer Protecting Gigafactories FAQs

**Q: Can VESDA and Li-ion detectors be used to detect small dust/powder particles in the air?**

A: VESDA is not designed for this purpose, but we are currently researching this topic to add environmental monitoring capabilities to upcoming models.

**Q: Can Li-ion Tamer detect smoke and other gases?**

A: No, Li-ion Tamer is a battery electrolyte vapour detection system, not a smoke detection system. For smoke detection, please refer to VESDA system. Li-ion Tamer is capable of detecting CO and H<sub>2</sub>, which are typically generated during lithium-ion battery thermal runaway.

**Q: Are VESDA and Li-ion Tamer systems currently installed in Gigafactories?**

A: Yes, VESDA is currently installed in several Gigafactories and Li-ion Tamer is currently in one with many more being installed this year.

**Q: Regarding “third party testing”, what does “pull back” mean after a cell has begun off-gassing?**

A: “Pull back” means stopping the battery from reaching thermal runaway by withdrawing power.

**Q: How many Li-ion Tamer monitoring sensors would be needed for a 2000 sqm formation room or dry room in a Gigafactory?**

A: The number of necessary sensors is determined by many factors, including numbers of racks, charge stations, etc. We can offer a bespoke design service, book a call today to discuss.

**Q: Where can I find datasheets, technical specifications, and further information on Li-ion Tamer?**

A: All information is available online at <https://xtralis.com/product/219/li-ion-tamer-gen-3-lithium-ion-battery-off-gas-detection-system>.

**Q: Has Li-ion Tamer been tested for use in electric car parks?**

A: Yes, it was determined that car park environments are not 'controlled' enough for current Li-ion Tamer sensing. Future product enhancements will address this application.

**Q: Is Li-ion Tamer suitable for all lithium-ion battery chemistries?**

A: Yes, Li-ion Tamer is chemistry "agnostic" and works for all lithium cells, including Lithium Iron Phosphate (LFP) batteries.

**Q: Do VESDA and/or Li-ion Tamer sensors detect some powder detection, for example, a burst powder bag?**

A: No, not by design. The filtration system in VESDA is designed to filter out larger particles like dust and dirt.

**Q: What kind of suppression systems, if any, is Li-ion tamer usually paired with?**

A: We make no recommendations on suppression as this is not our expertise.

**Q: Is there a spare relay (signal) to activate suppression measures?**

A: Outputs from Li-ion Tamer (via digital or serial connections) can be configured as you see fit. Please refer to the User Manual (Doc. No. [37141](#)).

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**Q: What advantage does Li-ion Tamer offer in terms of quick and safe response to thermal runaway in comparison to temperature sensors?**

A: Li-ion Tamer is a separate, additional safety layer as Battery Management Systems (BMSs) are not yet 100% reliable. Li-ion Tamer acts as an independent very early warning safety barrier and detects failure before thermal runaway, effectively preventing thermal runaway. Li-ion Tamer GEN 3 has additional temperature and humidity measurement capabilities.