LITHIUM ION BATTERY SAFETY MONITOR

Enhanced safety through electrolyte off-gas monitoring

- Cells off-gas prior to thermal run away
- Quickly identify battery issues
- Non-intrusive to battery system design
- Complimentary to other safety approaches
- Unique system information

System Schematic

- Sensor modules provide measurement of off-gas from battery modules
- Proprietary logic in controller produces actionable signal based on gas sensors
- System integration enables mitigating actions

Battery Modules

Nexceris Controller

System Integration
- BMS
- Fire suppression
- Alarms
- Indicators
- Ethernet
LITHIUM ION BATTERY SAFETY MONITOR

<table>
<thead>
<tr>
<th>Features</th>
<th>Advantages</th>
<th>Benefits</th>
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<tbody>
<tr>
<td>Detects electrolyte prior to thermal runaway</td>
<td>Early warning</td>
<td>Can actuate shutdown or fire suppression</td>
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<td>Can be combined with battery management system</td>
<td>Additional warning signal</td>
<td>Prevent false positives</td>
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<td>Can be tailored for contained or uncontained configuration</td>
<td>Flexible design</td>
<td>Superior for many applications</td>
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<td>Gas measurements do not require direct contact with batteries</td>
<td>Low impact on system design</td>
<td>Straight forward integration</td>
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Installation of Nexceris' lithium ion battery safety monitor is a cost effective way to safeguard critical equipment by detecting early warning signs of battery failure.

- Detect and report electrolyte leakage over time and prior to thermal runaway of the battery
- Prevent property loss with early and safe shutdown capability

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