WF 3168
C Series Battery Stack Monitor and Balancing Module

The WF 3168 from WireFlow is a complete battery monitoring and balancing device that includes a high voltage input multiplexer, ADC and balancing switches for each battery cell. The module can measure up to 8 series-connected cells with a voltage up to 15V per cell.

The module measurement circuit is galvanically isolated from the earth ground and provides up to 1000 VDC channel-to-earth ground isolation, making the module ideal for accurately monitoring large battery stacks. By using several WF 3168 modules it is possible to monitor every cell in a long string of series-connected cells.

Application areas
- Battery Backup Systems
- Battery Management System
- Electric and Hybrid Electric Vehicles
- High Power Portable Equipment
- Energy Storage Packs

Features
- Measures up to 8 battery cells in series
- 8 discharge FETs for passive balancing
- Stackable architecture
- Supports multiple battery chemistries, such as 12V lead-acid and 3.7V Li-ion
- Galvanically isolated from earth ground
- 1000 VDC ch-earth isolation
- Also for negative grounding systems

Specifications

<table>
<thead>
<tr>
<th>Feature</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cell Voltage Range</td>
<td>15 V</td>
</tr>
<tr>
<td>Resolution</td>
<td>0.1 mV</td>
</tr>
<tr>
<td>Accuracy, typical</td>
<td>± 0.6 mV @ 10 V</td>
</tr>
<tr>
<td>Max sampling rate</td>
<td>33 Hz</td>
</tr>
<tr>
<td>Balancing current</td>
<td>1.5 A/Ch</td>
</tr>
<tr>
<td>Ch-Earth Isolation</td>
<td>1000 VDC</td>
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</tbody>
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