**GSS Operational Capabilities**

- **Versatile** usage in diverse applications serving generation, transmission and distribution
- **Flexible** grid-ready design scales from hundreds of kW to hundreds of MW
- **Fully-integrated solution** can be sited in locations tough for traditional assets
- **Proven** operation in commercial revenue service

**Grid Energy Storage Applications**

- Frequency Regulation
- Blackstart
- Renewable Integration
- Spinning Reserve
- Power Plant Hybridization
- Ramp Rate Management
- Voltage Support
- Dynamic Line Rating Support
- Dynamic Stability Support

**GSS™ Grid Storage Solution**

- 100's of kW to 100's of MW scalability
- 15 minute to 4+ hour durations
- 90% AC-AC efficiency*
- Fast sub-second response time
- Zero emissions

---

**AEROS™ Controls**

- AEROS™ controls deliver full command and control functionality for seamless integration with your SCADA system.
- Automated or manual command and control via industry-standard secure protocols
- Real-time reporting of system capabilities and performance
- 250 millisecond standard response time, <30 millisecond high speed option available
- Communications protocol support: DNP3.0, IEC61850, Modbus TCP, SNMP and IEEE C37.118
- Remote monitoring and data collection with data historian option and GPS-time synchronized time stamping

---

**GBS™ Grid Battery System**

- Long-Duration (LD) and High-Rate (HR) container types available
- Number of energy storage racks is customizable
- Utilizes Nanophosphate® Lithium ion cells

---

**GBS™ Standard Containerized Energy Storage Units**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Power Rating</th>
<th>Energy Storage</th>
<th>Dimensions (LxWxH)</th>
<th>Mass</th>
<th>DC Efficiency</th>
<th>DC Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBS-C53-LD40</td>
<td>4 MW</td>
<td>4 MWh</td>
<td>53' x 8.5' x 9.5'</td>
<td>140,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C40-LD28</td>
<td>2.8 MW</td>
<td>2.8 MWh</td>
<td>40' x 8.5' x 9.5'</td>
<td>100,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C20-LD12</td>
<td>1.2 MW</td>
<td>1.2 MWh</td>
<td>20' x 8.5' x 9.5'</td>
<td>47,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C53-HR20</td>
<td>2 MW</td>
<td>575kWh</td>
<td>53' x 8.5' x 9.5'</td>
<td>64,000 lbs</td>
<td>97% (1C rate)</td>
<td>960V nominal</td>
</tr>
</tbody>
</table>

---

**MD100117-02**

- **AEROS™ Controls** deliver full command and control functionality for seamless integration with your SCADA system.
- Automated or manual command and control via industry-standard secure protocols.
- Real-time reporting of system capabilities and performance.
- 250 millisecond standard response time, <30 millisecond high speed option available.
- Communications protocol support: DNP3.0, IEC61850, Modbus TCP, SNMP and IEEE C37.118.
- Remote monitoring and data collection with data historian option and GPS-time synchronized time stamping.

**GBS™ Grid Battery System**

- Long-Duration (LD) and High-Rate (HR) container types available.
- Number of energy storage racks is customizable.
- Utilizes Nanophosphate® Lithium ion cells.

---

**GBS™ Standard Containerized Energy Storage Units**

<table>
<thead>
<tr>
<th>Model Number</th>
<th>Power Rating</th>
<th>Energy Storage</th>
<th>Dimensions (LxWxH)</th>
<th>Mass</th>
<th>DC Efficiency</th>
<th>DC Voltage</th>
</tr>
</thead>
<tbody>
<tr>
<td>GBS-C53-LD40</td>
<td>4 MW</td>
<td>4 MWh</td>
<td>53' x 8.5' x 9.5'</td>
<td>140,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C40-LD28</td>
<td>2.8 MW</td>
<td>2.8 MWh</td>
<td>40' x 8.5' x 9.5'</td>
<td>100,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C20-LD12</td>
<td>1.2 MW</td>
<td>1.2 MWh</td>
<td>20' x 8.5' x 9.5'</td>
<td>47,000 lbs</td>
<td>97% (C/2 rate)</td>
<td>944V nominal</td>
</tr>
<tr>
<td>GBS-C53-HR20</td>
<td>2 MW</td>
<td>575kWh</td>
<td>53' x 8.5' x 9.5'</td>
<td>64,000 lbs</td>
<td>97% (1C rate)</td>
<td>960V nominal</td>
</tr>
</tbody>
</table>

---

**GBS™ Grid Battery System**

- Four-quadrant capable.
- CE marking, IEEE 1547 and IEEE 519 compliance options.
- High- and low-voltage and frequency ride through.
- 50Hz or 60Hz connection frequency options.