Ewert Energy Systems is a research and development company focused on developing solutions for plug-in hybrid and electric vehicles and other energy storage applications.

The Orion BMS Connect is an internet based remote monitoring system that enables monitoring battery packs through a web browser, smartphone, or tablet. When the Orion BMS Connect device is used with a WiFi connection, this service allows companies, installers, and end users to remotely monitor battery pack performance data from Orion BMS or Orion Jr BMS systems in real time. Instant data, charts of recent history, and diagnostic information including recent events, fault codes, and freeze frame data are available. The device can also optionally log data to a local memory card and generate emailed alerts when certain events occur. Onboard memory allows this device to be used in certain mobile applications where data can be synchronized.

**Features:**
- Monitor multiple battery packs (in the same or different physical locations) on one page with a single account
- Share access to specific data streams with others to aide in remote diagnostics
- Synchronize data at user customizable intervals (as fast as every 10 seconds)
- Set up optional alerts delivered by email or other available means.
- Hardware firewall provides enhanced digital security for CANBUS
- Cache data and then automatically synchronize when in WiFi range (up to 6 hours of data polled at 10 second intervals; it is possible to cache more data if set to poll less frequently).
- Possible integration with other 3rd party CANBUS enabled devices (inquire with Ewert Energy for more information)

**Monitors the following parameters in real time:**
- Pack amperage
- Pack voltage
- Highest & lowest cell voltages and temperatures
- Pack state of charge
- Status of charge and discharge permitted
- Indicator if error codes are currently present
- Event log (shows BMS outputs turning on & off, etc.)
- Log of most recent DTC codes including freeze frame data

Live data graphs over the past 6 hours, 12 hours, 24 hours, or 1 week (or customizable historic date range). Data is stored in the cloud for a period of 3 months and can be retrieved and charted.
Optional Memory Card Data Logging Features:
- Compatible with micro SD memory cards up to 32 GB.
- Provides more in depth logs with a user customizable frequency from 100 mS to 10 seconds.
- Able to log individual cell voltages in addition to overall BMS parameters

Device specifications
- Connects with BMS over CANBUS
- Supports multiple WiFi protocols (802.11 b/g/n)
- Compatible with Orion BMS and CANBUS enabled Orion Jr. BMS units
- 12-48V DC power supply
- Real time clock to store data and time of each charge / discharge cycle
- Supported CANBUS Baud Rates: 125, 250, 500, 1,000 Kbps
- Compact size and shape
- Physical Dimensions: 3.29 in [8.34 cm] (W) x 2.42 in [6.15 cm] (L) x 1.00 in [2.54 cm] (H) plus antenna
- Product Weight: 2.8 oz

* Note: Data transmitted from the monitoring device is received, stored, and displayed on the website to be reviewed by the user. Data is not actively monitored for faults by Ewert Energy.

<table>
<thead>
<tr>
<th>Specifications</th>
<th>Min</th>
<th>Typ</th>
<th>Max</th>
<th>Units</th>
</tr>
</thead>
<tbody>
<tr>
<td>Supply Voltage</td>
<td>8</td>
<td>12-48</td>
<td>60</td>
<td>Vdc</td>
</tr>
<tr>
<td>Power Consumption</td>
<td>0.8</td>
<td></td>
<td></td>
<td>Watts</td>
</tr>
<tr>
<td>Operating Temperature</td>
<td>-20</td>
<td></td>
<td>60</td>
<td>C</td>
</tr>
</tbody>
</table>