Introducing the Redwire Modular Array for the Direct Distribution of Integrated Energy (MADDIE) Electrical Space Power Systems. The highly modular MADDIE architecture integrates the PV, charge controllers, and battery pack components into a single standardized EPS module, minimizing NRE and lead time while simplifying AIT.

Using standardized and flight qualified EPS modules in series and parallel combinations, full EPS systems are highly customizable for a wide variety of spacecraft and applications.

With world-class expertise in solar arrays, batteries, and mission systems Redwire is a premier provider for power systems, from components up to a complete EPS.

**APPLICATIONS**

+ Spaceflight Power  
+ Spaceflight Missions  
+ Local Power for Distributed Payload Elements  
+ Low Earth Orbit (LEO) Missions

**PARAMETERS**

<table>
<thead>
<tr>
<th>Module Mass</th>
<th>156 g</th>
</tr>
</thead>
<tbody>
<tr>
<td>Module Dimensions (L x W x H)</td>
<td>6.8&quot; x 6.5&quot; x .75&quot;</td>
</tr>
<tr>
<td>17.3 x 16.5 x 1.9 CM</td>
<td></td>
</tr>
<tr>
<td>Mission Life</td>
<td>5 Years</td>
</tr>
<tr>
<td>Number of Discharge Cycles</td>
<td>30,000 Cycles</td>
</tr>
<tr>
<td>Output Voltage</td>
<td>3.32 (Min)/4.0 (Nom)/4.2 (Max) V</td>
</tr>
<tr>
<td>Orbital Design Altitude Range</td>
<td>300 - 1000 KM</td>
</tr>
</tbody>
</table>

Redwire Space Power Systems are export controlled through an ECCN (Export Control Classification Number) issued by the United States Department of Commerce, ECCN 7A104. Export shipment requires successful application for an export license.

1 Modules combine in series/parallel to form full spacecraft EPS

2 Tune-able, higher discharge cycles can be achieved at a lower power output per module
Customers select MADDIE for space power applications because the solution offers:

+ **Modularity** – Combines solid-state battery cell, PV array, and charge controller into 1 modular package that is a building block for a flexible EPS architecture
+ **Single Solution Simplicity** – Integrating EPS components into one unit delivered by one vendor dramatically simplifies both system integration and procurement
+ **Reduced Lead Time & Cost** – Standardized modules produced through automation as off-the-shelf components can be quickly combined to meet mission needs
+ **Reliability** – modularity enables a fault tolerant EPS allowing for high resiliency

For more information about our space capabilities,

**CONTACT REDWIRE SPACE SALES**

**HERITAGE**

Redwire is a new leader in mission critical space solutions and high reliability components for the next generation space economy. With decades of flight heritage combined with the agile and innovative culture of a commercial space platform, Redwire is uniquely positioned to assist its customers in solving the complex challenges of future space missions. For more information, please visit [www.redwirespace.com](http://www.redwirespace.com).

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**PACE POWER SYSTEMS MADDIE**

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MADE IN THE USA

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