Resonon’s hyperspectral airborne systems are fully integrated turnkey solutions, with all hardware and software necessary to acquire and analyze georegistered hyperspectral data. Payload weights begin at 3.5 lb (1.6 kg).

**System components:**
- Hyperspectral imaging camera
- System control computer
- System control software
- SSD data storage
- GPS/IMU
- Georectification software
- Multiple calibration options
- Flexible mounting options
- **Spectronon** data analysis software
- Training services

**Spectronon** is Resonon’s user-friendly data analysis software. **Spectronon** contains tools for georectification, batch processing, mosaicing multiple datacubes, and analyzing hyperspectral data.

Sample datacubes and **Spectronon** software are available for free download at [www.downloads.resonon.com](http://www.downloads.resonon.com).

*Multiple options are available for each configuration. Please contact us to discuss your technical requirements.*

Visit [www.resonon.com](http://www.resonon.com) for complete product specifications.
### Hyperspectral Camera Options

**Resonon's** airborne systems can be fitted with the following hyperspectral imaging cameras:

<table>
<thead>
<tr>
<th></th>
<th>Pika L</th>
<th>Pika XC2</th>
<th>Pika NIR-320</th>
<th>Pika NIR-640</th>
<th>Pika NUV</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Spectral Range (nm)</strong></td>
<td>400 – 1000</td>
<td>400 – 1000</td>
<td>900 – 1700</td>
<td>900-1700</td>
<td>350 – 800</td>
</tr>
<tr>
<td><strong>Spectral Resolution (nm)</strong></td>
<td>2.1</td>
<td>1.3</td>
<td>4.9</td>
<td>2.5</td>
<td>2.3</td>
</tr>
<tr>
<td><strong>Spectral Channels</strong></td>
<td>281</td>
<td>447</td>
<td>164</td>
<td>328</td>
<td>196</td>
</tr>
<tr>
<td><strong>Spatial Channels</strong></td>
<td>900</td>
<td>1600</td>
<td>320</td>
<td>640</td>
<td>1600</td>
</tr>
<tr>
<td><strong>Max Frame Rate (fps)</strong></td>
<td>249</td>
<td>165</td>
<td>520</td>
<td>249</td>
<td>165</td>
</tr>
<tr>
<td><strong>Bit Depth</strong></td>
<td>12</td>
<td>12</td>
<td>14</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td><strong>Imager Weight</strong></td>
<td>1.3 lb (0.6 kg)</td>
<td>4.9 lb (2.2 kg)</td>
<td>5.9 lb (2.7 kg)</td>
<td>5.9 lb (2.7 kg)</td>
<td>4.7 lb (2.1 kg)</td>
</tr>
<tr>
<td><strong>Min. Complete System Weight</strong></td>
<td>3.5 lb (1.6 kg)</td>
<td>6.8 lb (3.1 kg)</td>
<td>8.7 lb (4.0 kg)</td>
<td>8.7 lb (4.0 kg)</td>
<td>6.6 lb (3.0 kg)</td>
</tr>
</tbody>
</table>

### GPS / IMU Options

<table>
<thead>
<tr>
<th></th>
<th>SBG Ellipse-N</th>
<th>SBG Ellipse-D</th>
<th>SPAN-IGM-A1</th>
<th>SPAN-CPT</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Accuracy, SBAS</strong></td>
<td>0.6 m</td>
<td>0.6 m</td>
<td>0.6 m</td>
<td>0.6 m</td>
</tr>
<tr>
<td><strong>Accuracy, Pitch</strong></td>
<td>0.2°</td>
<td>0.1°</td>
<td>0.04°</td>
<td>0.02°</td>
</tr>
<tr>
<td><strong>Accuracy, Roll</strong></td>
<td>0.1°</td>
<td>0.2°</td>
<td>0.04°</td>
<td>0.02°</td>
</tr>
<tr>
<td><strong>Accuracy, Heading</strong></td>
<td>1.0°</td>
<td>0.2°</td>
<td>0.22°</td>
<td>0.06°</td>
</tr>
<tr>
<td><strong>Weight</strong></td>
<td>0.10 lb (0.05 kg)</td>
<td>0.40 lb (0.18 kg)</td>
<td>1.13 lb (0.52 kg)</td>
<td>5.02 lb (2.28 kg)</td>
</tr>
<tr>
<td><strong>Dimensions</strong></td>
<td>4.6 x 4.5 x 2.4 cm</td>
<td>8.7 x 6.7 x 3.2 cm</td>
<td>15.2 x 14.2 x 5.1 cm</td>
<td>16.8 x 15.2 x 8.9 cm</td>
</tr>
</tbody>
</table>

### Additional Specifications and Options

<table>
<thead>
<tr>
<th>Component</th>
<th>Weight</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>System Control Computer</td>
<td>1.01 lb / 0.46 kg</td>
<td>System component</td>
</tr>
<tr>
<td>Downwelling Calibration Sensor (VNIR)</td>
<td>0.41 lb / 0.19 kg</td>
<td>For monitoring solar illumination</td>
</tr>
<tr>
<td>Downwelling Calibration Sensor (NIR)</td>
<td>2.60 lb / 1.18 kg</td>
<td>Known reflectance standard</td>
</tr>
<tr>
<td>Calibration Tarps</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pika L Gimbal Caddy</td>
<td>0.50 lb / 0.23 kg</td>
<td>UAV mounting package for Pika L airborne system. Compatible with gimbals designed for SLR cameras.</td>
</tr>
<tr>
<td>Vibration Isolation Pod</td>
<td>5.4 lb / 2.5 kg</td>
<td>Mounting package for manned aircraft.</td>
</tr>
</tbody>
</table>

**About Resonon**

Founded in 2002, Resonon provides turnkey hyperspectral imaging systems as well as custom solutions for complex hyperspectral and optical applications. Our high-precision hyperspectral imaging cameras are affordable, lightweight, easy to use, and have excellent image quality.