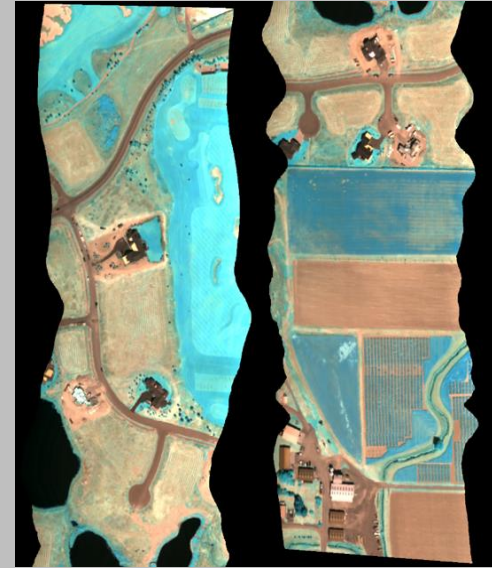


## Airborne Hyperspectral Imaging Systems



Complete hyperspectral imaging systems for airborne remote sensing.

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 3.4 lb (1.5 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 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:

|                                | <b>Pika L</b>   | <b>Pika XC2</b> | <b>Pika NIR</b> |
|--------------------------------|-----------------|-----------------|-----------------|
| Spectral Range                 | 400 – 1000 nm   | 400 - 1000 nm   | 900 – 1700 nm   |
| Spectral Resolution            | 2.1 nm          | 1.3 nm          | 4.9 nm          |
| Spectral Channels              | 281             | 447             | 164             |
| Spatial Channels               | 900             | 1600            | 320             |
| Max Frame Rate at full frame   | 249 fps         | 165 fps         | 520 fps         |
| Bit Depth                      | 12              | 12              | 14              |
| Imager Weight                  | 1.3 lb (0.6 kg) | 4.9 lb (2.2 kg) | 5.9 lb (2.7 kg) |
| Minimum Complete System Weight | 3.4 lb (1.5 kg) | 6.8 lb (3.1 kg) | 8.7 lb (4.0 kg) |

## GPS / IMU Options

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

## Additional Specifications and Options

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

### 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.