MWIR-60
Video Rate Hyperspectral Imager

Snap-Shot Mode Imaging Spectrometer Produces Data Cubes at Video Rates

– **No Moving Parts**
– **Unique Patented Technology**
– **Ideal for Moving Platforms and Transient Events**
– **Includes Visible Band Aiming Camera**

Data Cube	41 x 33 spatial x 120 spectral
Data Rate	60 cubes/sec
Spectral Range	3 – 5 µm
Spectral Resolution	34 nm/bin (avg)
Field(s) of View	6.7°x5.4° & 4.8°x3.6°
Dimensions	4" W x 5" H x 21" L
Weight	10 lbs
Power	14 Watts

Hyperspectral Imaging
### Combining Imaging with Spectral Analysis

A conventional color image has three colors per pixel, but a hyperspectral image can have **hundreds**. Because every material has a characteristic spectral signature, this information can be used to identify an object by analyzing its *spectra*.

Typical hyperspectral imagers scan a scene over time to build a data-cube. This build time makes these technologies unsuitable for high speed applications.

BD&E's hyperspectral imaging systems use our patented *HyperPixel Array™* (HPA™) technology to combine spectral data with spatial information to create three-dimensional *hyperspectral data-cubes at video rates.* Two dimensions describe the position of a point in space and the third dimension is the spectral signature at that point.

Using no moving parts, this proprietary *HyperPixel Array™* technology creates a data-cube in one **instantaneous** frame, eliminating motion artifacts.

Spectral Identification of Potassium Nitrate
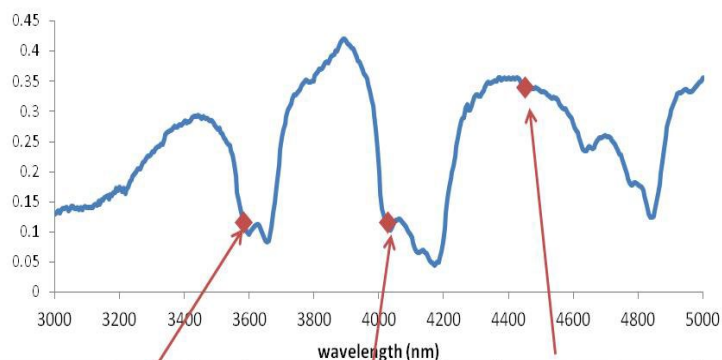
Applications

- **Standoff Detection**
- **Material Identification**
- **Chemical Defense**
- **Environmental Monitoring**
- **Geologic Mapping**
- **Biological Research**
- **Medical Imaging**
- **Automatic Target Recognition**

3.2017

BODKIN DESIGN & ENGINEERING, LLC

TEL 617.795.1968
FAX 617.795.1969

WWW.BODKINDESIGN.COM
SALES@BODKINDESIGN.COM