

# Headwall



## PRODUCT DATA SHEET



VNIR E



SWIR 640

### Micro-Hyperspec<sup>®</sup> Imaging Sensors

- Up to 369 spectral bands\*
- Up to 1,600 spatial bands\*
- Collect full hyperspectral data for every pixel
- Frame rates up to 450 Hz\*

*\*depending on model chosen*

- VNIR, NIR, Ext. VNIR, SWIR versions
- Airborne and ground-based applications
- All-reflective, concentric optical layout
- High spectral & spatial resolution

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| Spectral Range                 | VNIR<br>(400-1000nm) |                 | NIR<br>(900-1700nm) |     | Extended VNIR<br>(600-1700nm) | SWIR<br>(900-2500nm)  |                 |
|--------------------------------|----------------------|-----------------|---------------------|-----|-------------------------------|-----------------------|-----------------|
|                                | A-Series             | E-Series        | 640                 | 320 | 640                           | 384                   | 640             |
| Micro-Hyperspec® Configuration | Silicon CCD          | sCMOS           | InGaAs              |     |                               | MCT                   |                 |
| Focal Plane Array              | Silicon CCD          | sCMOS           | InGaAs              |     |                               | MCT                   |                 |
| Pixel Pitch (microns)          | 7.4                  | 6.5             | 15                  | 30  | 15                            | 24                    | 15              |
| Aperture                       | F/2.5                |                 |                     |     |                               |                       |                 |
| Slit Length (mm)               | 10.5                 |                 |                     |     |                               |                       |                 |
| Dispersion/Pixel (nm)          | 1.9                  | 1.63            | 6                   | 12  | 4.1                           | 9.6                   | 6               |
| Entrance Slit Width (µm)       | 20                   |                 | 25                  |     | 20                            | 25                    | 20              |
| FWHM Slit Image (nm)           | 5.8                  | 5.8             | 10                  | 10  | 5.5                           | 10                    | 8               |
| Spectral Bands                 | 324                  | 369             | 134                 | 67  | 267                           | 166                   | 267             |
| Spatial Bands                  | 1004                 | 1600            | 640                 | 320 | 640                           | 384                   | 640             |
| Aberration-Corrected           | Yes                  |                 |                     |     |                               |                       |                 |
| Max. Frame Rate (Hz)           | 90                   | 250             | 120                 | 346 | 120                           | 450                   | >200            |
| ADC Bit Depth                  | 12                   | 16              | 14                  |     |                               | 16                    |                 |
| Cooling                        | No                   | TE-cooled       | TE-cooled           |     |                               | Stirling-cooled       |                 |
| Digital Output Format          | Base CameraLink      | Full CameraLink | Base CameraLink     |     |                               | RS232/Base CameraLink | Base CameraLink |
| Weight without lens (lb / kg)  | 1.6 / 0.7            | 2.4/1.1         | 1.9 / 0.9           |     |                               | 4.4 / 2.0             | 3.4 / 1.6       |
| Max Power (W)                  | 6.6                  | 13.2            | 2.5                 | 4   | 4                             | 14.4                  | 14              |

## APPLICATIONS



**GEOLOGY & MINING**



**INFRASTRUCTURE INSPECTION**



**ENVIRONMENTAL**

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