Intelligent multispectral imaging system

At CSEM we have developed a snap-shot multispectral imaging technology. Our patented optics and machine learning intelligence allow us to remove unnecessary data acquisition and processing whilst maintaining accuracy. The modular hardware allows flexible and fast prototyping for application specific systems.

The world is information, view its full version!

<table>
<thead>
<tr>
<th>Example Characteristics</th>
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<tbody>
<tr>
<td>Number of Spectral Channels</td>
<td>54</td>
</tr>
<tr>
<td>Wavelength Range</td>
<td>450 – 880 nm</td>
</tr>
<tr>
<td>Spectral Resolution</td>
<td>12 nm</td>
</tr>
<tr>
<td>Cube Resolution</td>
<td>280 x 280 x 54</td>
</tr>
<tr>
<td>Frame Rate</td>
<td>72 fps</td>
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<tr>
<td>Detector Type</td>
<td>Si-CMOS</td>
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<tr>
<td>Shutter Type</td>
<td>Global Shutter</td>
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<tr>
<td>Camera Interface</td>
<td>USB 3.0</td>
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</tbody>
</table>

All of these specifications are customizable

Advantages

- Tailored multispectral system
  - Hand pick the spectral lines and their bandwidth for your application
  - Choose the spatial resolution for your needs
  - Remove unwanted data for increased speed and efficiency
- Intelligent neural network for accurate classification and decision making
- Modular architecture and rapid prototyping

Applications

- Mining and Minerology
- Process Control
- Medical Diagnostics
- Precision Agriculture
- Environmental Monitoring

Discover our technology