xiSPEC

Compact hyperspectral cameras with USB3 and PCIe interfaces

ximea
xiSPEC2 hyperspectral cameras
The smallest USB3 and PCIe hyperspectral cameras.

Facts
- Cameras with 15 up to 150 bands
- 170 fps with USB3 interface, 340 fps with PCIe
- Snapshot and linescan versions
- Smallest and lightest hyperspectral cameras available
- Low power consumption
- Rugged, without moving parts
- Each camera is spectrally calibrated

Features
- Small - fast - flexible
- Snapshot with global shutter
  4x4 with 15 spectral bands in the red and NIR 600-860 nm range
  4x4 with 16 spectral bands in the visible 460-600 nm range
  5x5 with 24 spectral bands in the NIR 665-960 nm range
- Multi-linescan with global shutter
  150 spectral bands 470-900 nm range
- Starter kit available for rapid development
- Flexible and programmable GPIO options
Hyperspectral
A Fabry-Perrot interference filter array on top of a fast CMOS sensor creates the basis for a camera design that combines hyperspectral imaging with high frame rates and a compact form factor. The obtained imagery can be interpreted to determine the chemical composition of materials.

Small & light
Simply the most compact method of retrieving hyperspectral imagery of a subject. Being small and light as well as having low power consumption makes the cameras ideal for mobile applications such as UAVs or handheld devices.

Fast
USB3.1 or PCIe interfaces allow extreme data acquisition rates. For either option, the data can be processed on the fly or saved for later analysis.

Housing examples
- Standard C/CS-mount with model-specific, customized filter glass
- Housed cameras with Micro-B connector
- Semi housed cameras with ‘FL’ ribbon cable connector

PCI Express Options
- All HSI cameras are compatible with xiFLY configurations and are available with PCIe interfaces
- High speed interface with compact ribbon cable connection
- Up to 340 fps
- Interface is ideal for embedded/mobile and NVIDIA Jetson installation
- Inquire with your representative for availability

Supported operating systems
- Windows
- Linux
- macOS

Language support
- C
- C#
- python

Standards
- GENICAM
- USBV
- PCI EXPRESS

Supported vision libraries
- MATLAB
- LabVIEW
- HALCON
- OpenCV
- and many more…
### Sensors and models

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<td>11.3 x 6.0 x 12.7</td>
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<td>1.6</td>
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**Notes**

¹ Full resolution. RAW8 format

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### Further information

Please visit us at [www.ximea.com](http://www.ximea.com) for complete and up-to-date specifications. Get in touch with our teams at sales@ximea.com. We will be glad to assist!