

HSC-2 HYPERSPECTRAL CAMERA



**Frame camera
True 1 Mpixels
Fast frame rate
Up to thousand spectral bands
C-mount camera now available**

Senop HSC-2 Hyperspectral Camera is a frame-based spectral system providing snapshot images in VNIR spectral range with up to thousand of narrow bands. This unique snapshot device providing only true image pixels with 1Mpixel resolution. No interpolation used.

The frame-based approach with integrated positioning and IMU enables easy image stitching for the mosaics with high resolution images. The Senop HSC-2 camera has been used with a wide variety of platforms including drones and fixed wing UAVs in several applications like: agriculture, forestry and water research, industry, medical and forensic.



SENOP

HSC-2 HYPERSPECTRAL CAMERA



Product set includes

- Senop HSC-2 Hyperspectral camera
- AC/DC Adapter with cable
- Power cable
- Ethernet cable 3m
- Trig-sync cable
- HSI-2 PC software in USB-memory
- Transport case
- Instruction manual



TECHNICAL DATA

| PARAMETER | SPECIFICATION | REMARKS |
|-----------------------------|---|--|
| Camera versions | HSC-2.1-B: 450-800 nm HSC-2.1-C: 500-900 nm HSC-2.3-C: 500-900 nm C-mount | HSC-2.3-C is a C-mount camera for example microscopical imaging. |
| Spectral FWHM | 6-18 nm | |
| Spectral Step | 0.1 nm | |
| Spectral Bands | up to 1000 | The bands are freely selectable/programmable. |
| Horizontal FOV | 36.8° | Diagonal 52.0° |
| Vertical FOV | 36.8° | Diagonal 52.0° |
| Image Sensor | CMOS | Pixel size is 5.5 μm x 5.5 μm. |
| Dynamic Range | 10/12 bits | |
| Max Image Rate (frames / s) | 74 (12 bit) 149 (10 bit) | The camera exposures each band separately. |
| Image Resolutions | 1024x1024 | All pixels are true image pixels. No interpolation used. |
| Exposure time | Adjustable | Maximum frame rate may be limited if exposure time is long. |
| Memory | 1TB | Shooting time with max frame rate 12 bit: 1h 45min & 10 bit: 1h 17min. |
| Connections | GigE RJ-45 Mini-Displayport v1.2 IO port with UART and 4GPIO pins MMCX for external GPS antenna (if needed) USB-C for irradiance sensor | |
| Weight | 990 g | |
| Dimensions (l x w x h) | 199 mm x 131 mm x 97 mm | |
| Positioning | GPS and BeiDou | With external antenna also Glonass and Galileo. |
| Voltage supply | 7-17 VDC | Set includes AC/DC adapter with cable. |
| Inertial Measurement Unit | Gyroscope and 3 axis accelerometer | |
| Adjustable optics | Focus distance: 30 cm - ∞ | FOV is limited with less than 30 cm distances. |
| Live Use | External display can be attached | |
| PC-software | Senop HSI-2 | Windows 7 & 10 |
| Data export | Standard ENVI | |
| Connectivity | Open API | |

ACCESSORIES

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| Senop irradiance sensor | Capable of monitoring changes in the lighting conditions during the imaging for example in remote sensing applications. |
| Reflectance targets | Reflectance targets are placed to the survey site and used as field calibration targets for processing reflectance images. |

Fully compatible with PerClass MIRA spectral image interpret software

Our policy is continuous development and improvement. We therefore reserve the right to alter technical data without notice.



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