



## Senop HSC-2 Hyperspectral Camera

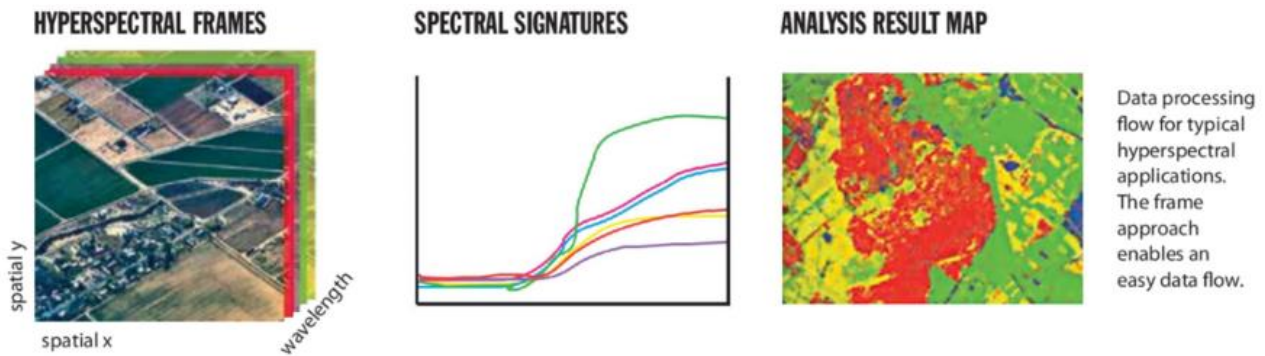
Senop HSC-2 Hyperspectral Camera is a frame-based spectral system providing snapshot images in VNIR spectral range with up to thousand of narrow bands. This hyperspectral camera is the only snapshot device on the market providing only **true image pixels** with 1Mpixel resolution. **No interpolation 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. Senop cameras have been used widely in several areas like agriculture, forestry and water research, industry, medical and forensic.

### TECHNICAL DATA

Spectral Range	500-900nm	400-700nm 450-800nm 550-1000nm can be developed on demand
Spectral FWHM	5-15 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 (12bit) 149 (10bit)	The camera exposures each band separately.
Image Resolutions	1024x1024	All pixels are true image pixels. No interpolation used.
Connections	GigE RJ-45 Mini-Displayport v1.2 IO port with UART and 4GPIO pins MMCX for external GPS (if needed)	
Exposure time	Adjustable	Maximum frame rate may be limited if exposure time is long.
Weight	990g	
Dimensions (l x w x h)	199,5mm x 130,9mm x 97,2mm	
Voltage supply	7-17 VDC	Set includes AC/DC adapter with cable.
Memory	1TB	Shooting time with max frame rate 12bit: 1h45min & 10bit: 1h17min
Positioning	GPS and BeiDou	With external antenna also Glonass and Galileo
Inertial Measurement Unit	Gyroscope and 3 axle accelerometer	For accurate image stitching
Adjustable optics	Focus distance: 30cm - ∞	FOV is limited with less than 30cm distances
Live Use	External display can be attached	
PC-software	Senop Hyper Spectral Imager	Windows 7 & 10
Data export	Standard ENVI	
Connectivity	Open API	For developers who wants to control the camera.

# SENOP



Senop HSC-2 camera saves image frames in ENVI datacube. 1 Datacube includes 1 predefined shooting sequence in order of wavelengths. Multiple sequences can be freely set in HSI PC-software.



Product set includes:

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

More information:

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