

Monarch Pro

Hyperspectral imaging camera



Description

Monarch Pro-Unispectral Monarch Pro is an ideal choice for industrial, laboratory, etc. With the compact size and versatility, this cost-effective spectral camera accommodates diverse user needs. Equipped with a ColorIR® tunable filter, the Monarch Pro camera captures images in 10 NIR bands by default. It also includes a user-friendly API/SDK for continue data collection with 1nm step. The camera package includes a range of accessories, ensuring convenient and smooth operation.

Key Features

- High-speed cameras
- Spectral center wavelength range: 510-690nm;713-920nm, continuously adjustable
- 60 frames/s with single band mode
- Compatible with Windows/Android/Linux platforms with API
- USB 3.0 high-speed data transfer
- Oil proof, moisture-proof, and dust-proof design, suitable for agricultural and industrial testing scenarios

Applications

- Food quality
- Smart Agriculture
- Research Institutes
- Industrial sorting
- Biopharmaceuticals

Specifications

NIR, VIS Hyperspectral Camera

F/#	4.7
EFL	4.98 mm
H-FOV,V-FOV, D-FOV	31.5°,25.5°,39.8°
Image Resolution	1280x 1024
Preview Mode	60 FPS
Gain	X1-X10
Exposure Time	1-500 ms

Spectral

FWHM	25nm±5@image center
Spectral Response	500-700nm;700-930nm
Spectral Band Range	510-690nm;713-920nm
Spectral Accuracy	±5nm
Working Mode	Single frame/spectral image cube
Data Format	ENVI (RAW) & PNG
Spectral Channel Numbers	181;208

System

Input Voltage	5 VDC
Power Consumption	<1.6W (Peak)
Peak Current	0.32A
Interface Protocol	USB-3.0

Working Environment

Temperature	0 ° -70 ° C
Humidity	<90%
Size	84x80x23mm
Material	Aluminum Alloy 6063
Thermal Equilibrium Temperature	35°C

System Development

Host Computer	Windows/Linux/Android
Develop Tools	Python/C API