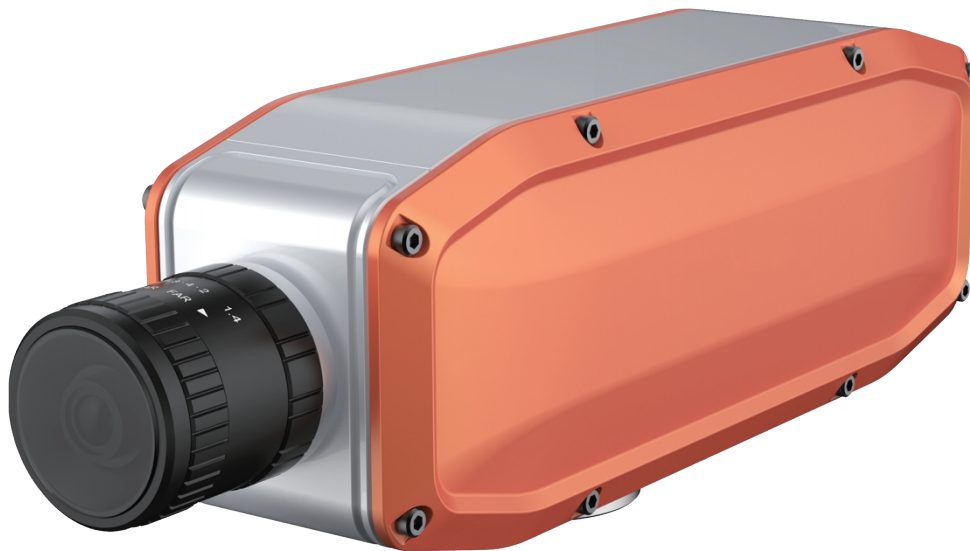
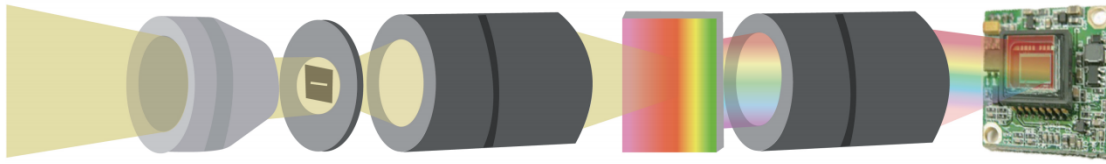

FS-50 near-infrared hyperspectral camera



The near-infrared hyperspectral camera FS-50 adopts an optical design with high light transmittance, which improves the near-infrared detection capability of the hyperspectral camera to a new standard. Spectral resolution is better than 3.5nm (change the slit size to achieve higher spectral resolution, but will affect the signal intensity). The near-infrared hyperspectral camera FS-50 covers 900-1700nm, adopts push-broom imaging, and can reach 128 spectral channels. The full spectrum acquisition speed can reach 128FPS, and it has a band selection (ROI) function, which can achieve higher speed.

- Machine Vision, Color Detection, Visible/NIR Detection Hyperspectral Solutions
- Spectral range: 900-1700nm, wavelength resolution 2.5nm, up to 1.5nm (replace the slit size to achieve higher spectral resolution, but it will affect the signal intensity)
- Frame rate: full spectrum acquisition up to 128Hz

Measurement principle



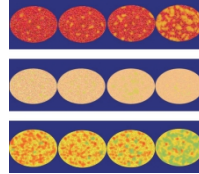
Typical application



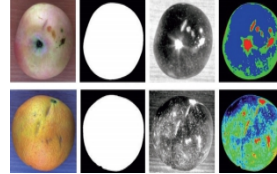
Print inspection



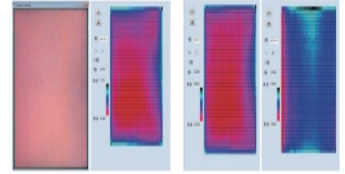
Textile inspection



Drug composition analysis



Fruit and vegetable sorting



Screen detection

Technical parameter

Serial number	Index	
1	Spectral range	900-1700nm
2	Spectral resolution	better than 3.5nm
3	Detector	CMOS
4	Detector interface	Camera Link
5	Detector power supply	12V DC
6	Detector target size	9.6mm x 7.68mm
7	Detector native resolution	320*256
8	Detector original pixel size	30 μm x30 μm
9	Pixel bit depth	16 bits
10	Slit length	9.6mm
11	Slit width	30μm
12	Recommended way to merge cells	2x2
13	Spatial dimension effective number of pixels	160
14	Number of bands	128
15	Field of view (FOV)	15.6°@f=35mm
16	Instantaneous field of view (IFOV)	0.71mrad@f=35mm
17	Frame frequency	344fps
18	Size	About 310mm*60mm*65mm (without lens)
19	Weight	About 2kg
20	Operating temperature	0-50℃
21	Storage temperature	-25-60℃
22	Interface	CS-Mount