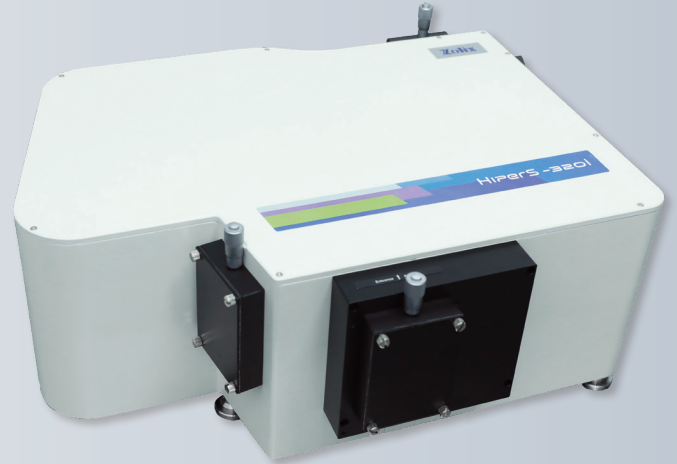


HiperS-320i

Aberration-Free Imaging Monochromator / Spectrometer

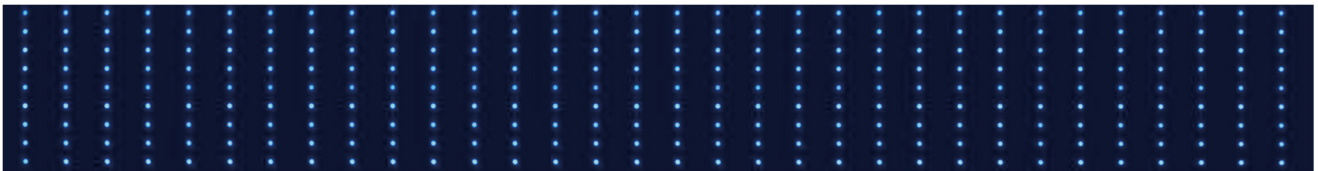
HiperS-320i aberration-free imaging spectrometer adopts full focal plane imaging correction technology to suppress aberrations to the maximum extent and obtain ideal imaging effects. At the same time, its light throughput and resolution have also been greatly improved. The high imaging quality brings high spatial resolution, making it compatible with multi-channel spectral measurements.



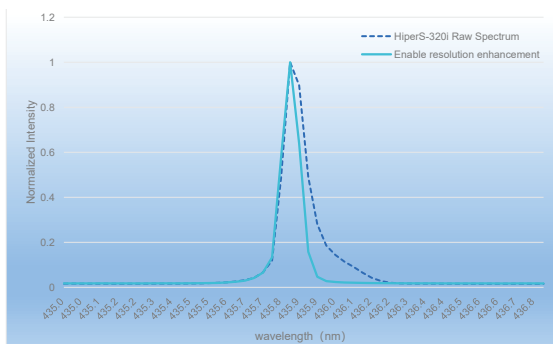
Features and Benefits

- Two entrance ports and two exit ports are optional and can be switched automatically to enhance the flexibility of spectral measurement;
- The on axis grating rotation increases the active area of gratings and improve the consistence of grating efficiency.
- Internal intensifier module of spectral resolution further improve spectrometer resolution and image quality.

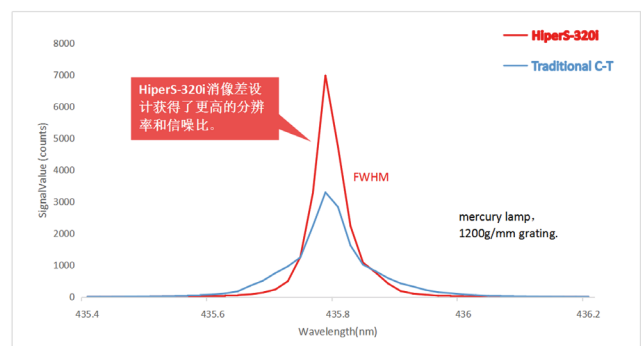
The below picture showcases the ideal imaging effect, reflecting better spatial resolution and spectral resolution.



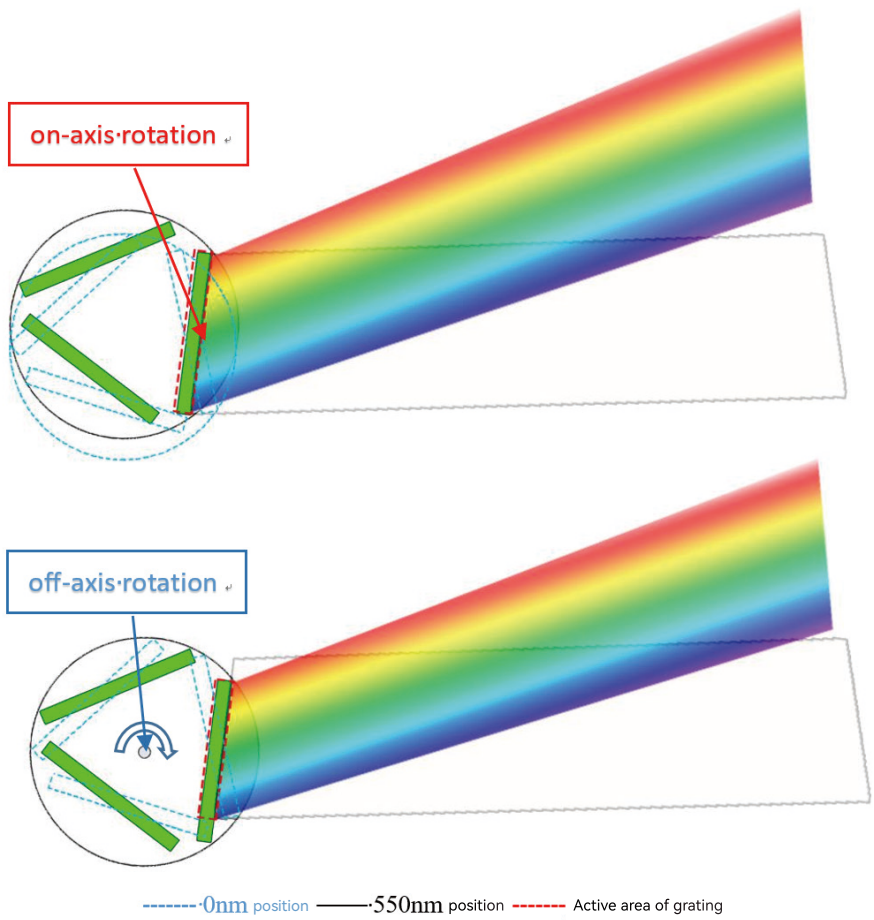
Note: 9-core fiber bundle / 100 um core diameter, imaging area height of 3.8 mm



Enabling the intensifier module, the spectral resolution can be further increased by up to 20%.

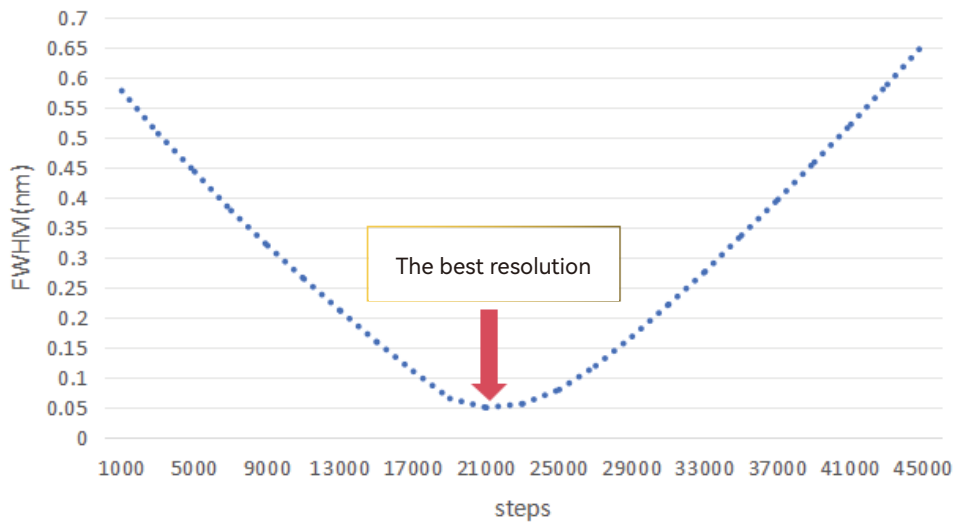


Aberration-free correction technology brings higher resolution, better peak shape, and more precise wavelength.



The utilization rate of the grating using on-axis rotation increases by 15%

The use of intelligent auto-focusing technology allows the spectrometer to be in the best resolution and imaging state when switching gratings.



Auto-focusing obtains the best focus plane

Specifications(@1200g/mm)

Model	HiperS-320i
Focal Length(mm) 320	320
Aperture Ratios F/4.4	F/4.4
ScanRange (nm) 0 ~ 1430	0 ~ 1430
Resolution (nm)-PMT 0.06	0.06
Resolution (nm)-CCD(15µm) 0.12	0.12
Dispersion(nm/mm) 2.29	2.29
Wavelength Accuracy (nm) ±0.2	±0.2
Wavelength Repeatability (nm) ±0.025	±0.025
Step(nm) 0.005	0.005
Stray Light 5×10 ⁻⁵	5×10 ⁻⁵
Focal Plane Size(mm) 29 (w) × 14 (h)	29 (w) × 14 (h)
Optical Axis Height (mm)	156.3~171.3
Grating Size(mm) 68 × 68	68 × 68
Grating Mount	On-axis Triple Turret
Slit	0.01-3mm continuous manual adjustment, motorized slit is optional ; Slit height 2,4,14 mm swit cable
Size(mm)、Weight (kg)	591 × 460 × 260 (L × W × H), 30kg
Communication Interface	USB2.0 or RS-232

Specifications @ different gratings						
Grating(g/mm)	2400	1800	1200	600	300	150
Dispersion(nm/mm)	0.91	1.39	2.29	4.87	9.97	20.13
Scan Range (nm)	0~715	0~953	0~1430	0~2860	0~4290	0~11440
Step(nm)	0.0025	0.0035	0.005	0.01	0.02	0.04
Resolution of Slit(nm)	0.03	0.04	0.06	0.12	0.24	0.48
Resolution(nm)-CCD(15µm)	0.048	0.073	0.12	0.256	0.523	1.06
CCD One Shot Spectral Range (nm@30mm CCD)	26.4	40.3	66.4	141.2	289.1	583.8
Wavelength Accuracy(nm)	±0.1	±0.15	±0.2	±0.4	±0.8	±1.6
Wavelength Repeatability(nm)	0.015	0.02	0.025	0.05	0.1	0.4

Note 1: Slit resolution is measured at central wavelength of 435.83nm, slit width of 10 µm.

Note 2: Both of CCD one shot spectral range and dispersion are typical value at central wavelength of 435.83nm, the spectral range will become narrower as the central wavelength increase.

Note 3: As the central wavelength increases, the dispersion value decreases. As the central wavelength decreases, the dispersion value increases.

Note 4: The front slit can't install motorized slit.

Typical Selection Table

Model	Description
HiperS-3204i	Side entrance slit, double CCD exit ports
HiperS-3205i	Side entrance slit, front exit slit
HiperS-3206i	Side entrance slit, front CCD exit port
HiperS-3207i	Side entrance slit, double exit slits
HiperS-3208i	Side entrance slit, front CCD exit port and side exit slit
HiperS-3224i	Double entrance slits, double CCD exit ports
HiperS-3227i	Double entrance slits, double exit slits
HiperS-3228i	Double entrance slits, front CCD exit port and side exit slit
HiperS-3247i	Side entrance slit, double exit slits with UV coating
HiperS-3248i	Side entrance slit, front CCD exit port and side exit slit with UV coating

Note 1: All the models are manual slits (motorized slits are optional);

Note 2: The gratings need to be selected individually, up to 3;

Note 3: All the models don't include the filter wheel and shutter which need to be selected individually.

Dimensions:

