

Horiba iHR 320

HORIBA Jobin Yvon

iHR320Core3 1 piece

iHR320 "Triple Grating" Imaging -
Monochromator/Spectrograph

- Czerny-Turner Mount,
- Image corrected via Toroidal
- Collimator mirror, - Focal length: $f = 320\text{mm}$, - Aperture ratio: $f / 4.1$,
- Specifications for gratings with 1200 lines/mm:
 - * Dispersion: 2.31 nm/mm ,
 - * Resolution: 0.06 nm at $10\text{ }\mu\text{m}$ slit width with PMT,
 - * Stray light suppression: 1.5×10^{-4} , measured 1 nm beside 514nm laser line,
 - * Mechanical wavelength range: $0\text{ to }1500\text{nm}$,
 - * Wavelength accuracy: $\pm 0.2\text{nm}$ over 500nm ,
 - * Scan speed: 160nm/sec ,
 - * Reproducibility: $\pm 0.075\text{nm}$,
 - * Flat-field (height x width): $12 \times 30\text{mm}^2$,
- Direct drive,
- Dimensions (L x W x H): $17 \times 422 \times 192\text{mm}^3$; weight 20kg , height of optical axis 98mm wo feet,
- Equipment includes:
 - * Stepper motor for wavelength and grating selection,
 - * USB 2.0 interface,
 - * Automatic "on axis" grating changer (turret) for three gratings.

1 piece 520-29-120 ... 600 lines/mm holographic grating $400\text{-}1300\text{ nm}$

1 piece 520-24-120 ... 1200 lines/mm holographic grating $400\text{-}1200\text{ nm}$

1 piece 520-19-120 ... 1800 lines/mm holographic grating $450\text{-}850\text{ nm}$

MAI-IR 1 piece

Resolution multichannel adapter for iHR320/550

MSL-I3FN2 1 piece

Motorized axial entrance slit (iHR320)

- Slit width: $0\text{ to }2\text{ mm}$
- Slit height: $1\text{ and }15\text{ mm}$



- Step size: 2 μm

MSL-I3SN2 1 piece

Motorized lateral entrance slit (iHR320)

- Slit width: 0 to 2 mm
- Slit height: 1 and 15 mm
- Step size: 2 μm

MSL-I3SX2 1 piece

Motorized lateral exit slit (iHR320)

- Slit width: 0 to 2 mm
- Slit height: 1 and 15 mm
- Step size: 2 μm

MSL-IANM 1 piece

Motorized folding mirror (input) for selection between axial and lateral entry

MSL-IAXM 1 piece

Motorized folding mirror (output) for selection between axial and lateral exit

SYNCER-1024x256-OE 1 piece

Syncerity CCD camera, 1024x256 pixels, open electrode

- Chip type: front illuminated open electrode (E2V Grade 1),
- Peltier cooling (multi-stage thermoelectric),
- Chip temperature: -60 °C,
- CCD format: 1024 x 256 pixels,
- Pixel size: 26 μm x 26 μm ,
- Active area: 26.6 x 6.7 mm²,
- Spectral range: 200 to 1050 nm,
- Quantum efficiency (at 20 °C):
 - * 31% at 300 nm,
 - * 58% at 750 nm,
 - * 12% at 1000 nm,
- Dark current at -60 °C: typically 0.0052 e⁻ / pixel / s,
- Readout noise: typically 4.7 e⁻; max 7 e⁻ (rms) at 45 kHz, typical 17 e⁻; max 20 e⁻ (rms) at 1 MHz,
- Lifetime vacuum guarantee!
- 16-bit dynamic range,
- Scan rate 45 kHz and 1 MHz,

- USB2 interface
- Includes power supply

SDRIVE-500 1 piece

CCD shutter control for Sincerity
for Sincerity, Synapse Plus, and SynapseEM cameras

MSH-ICF 1 piece

CCD shutter for iHR320/550
for mounting behind the axial entrance slit

MSH-ICS 1 piece

Internal CCD shutter for IHR320/IHR550
for mounting behind the lateral entrance slit

220F 1 piece

220F fiber adapter with quartz imaging optics
to match fiber to microHR, Triax, iHR, or FHR 640 spectrometer. Includes adapters for 1/4" ferrule or SMA inputs, an XY positioner, and two mounted quartz lenses that slide on rails for user adjustment.

CSW-VVW - LabView driver for detectors and monochromators**CSW-SYNERJY-SDK 1 piece**

SDK software development kit for monochromators and detectors
for use with various programming environments including Microsoft Visual C++, Microsoft Visual Basic, and Microsoft Visual Basic for Applications. Contains sample programs for each programming language.

1 piece 520-29-120 ... 600 lines/mm holographic grating 400-1300 nm

1 piece 520-24-120 ... 1200 lines/mm holographic grating 400-1200 nm

1 piece 520-19-120 ... 1800 lines/mm holographic grating 450-850 nm