

Optics

Optical Systems

Free Space Isolators

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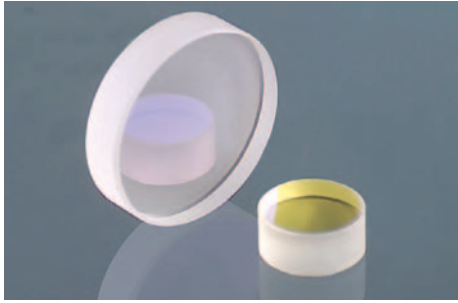
Polarization Optics

Beamsplitters

Filters & Attenuators

Gas Cells

Ar-Ion Mirrors



Specifications

- **Substrate Material:** Fused Silica
- **Front Surface Flatness:** $\lambda/10$
- **Back Surface:** Fine Ground
- **Surface Quality:** 10-5 Scratch-Dig
- **Clear Aperture:** >80% of Diameter
- **Diameter Tolerance:** +0.0/-0.2mm
- **Thickness:** 6.0 ± 0.3 mm
- **Wedge:** ≤ 3 arcmin
- **Damage Threshold:** See Table
- **Chamfers:** 0.50mm x 45° Both Sides

External cavity high energy Ar-Ion laser mirrors are designed to withstand damage from high-power CW argon laser beams (see the price box below). Each optic is individually tested to ensure better than $\lambda/10$ flatness and surface finishes of 10-5 scratch-dig.

Ar-Ion $\lambda = 244-257$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H02	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	244-257nm	12.7mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-H02	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	244-257nm	25.4mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-J02	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	244-257nm	25.4mm	45°	Ravg>99.5%	1 kW/cm ² CW

Ar-Ion $\lambda = 300-308$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H05	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	300-308nm	12.7mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-H05	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	300-308nm	25.4mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-J05	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	300-308nm	25.4mm	45°	Ravg>99.5%	1 kW/cm ² CW

Ar-Ion $\lambda = 333-364$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H07	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	333-364nm	12.7mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-H07	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	333-364nm	25.4mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-J07	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	333-364nm	25.4mm	45°	Ravg>99.5%	1 kW/cm ² CW

Ar-Ion $\lambda = 458-528$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H10	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	458-528nm	12.7mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-H10	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	458-528nm	25.4mm	0°	Ravg>99.5%	1 kW/cm ² CW
NB1-J10	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	458-528nm	25.4mm	45°	Ravg>99.5%	1 kW/cm ² CW

Excimer Laser Mirrors

The specifications for the Excimer laser mirrors are the same as those found above in the specifications box of the Ar-Ion mirrors

ArF $\lambda = 193$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H01	\$ 220.00	£ 138.60	€ 204,60	¥ 2,101.00	193nm	12.7mm	0°	Ravg>98.0%	3 J/cm ² (10ns Pulse)
NB1-H01	\$ 270.00	£ 170.10	€ 251,10	¥ 2,578.50	193nm	25.4mm	0°	Ravg>98.0%	3 J/cm ² (10ns Pulse)

KrF $\lambda = 248$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H03	\$ 130.00	£ 81.90	€ 120,90	¥ 1,241.50	248nm	12.7mm	0°	Ravg>97.0%	5 J/cm ² (10ns Pulse)
NB1-H03	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	248nm	25.4mm	0°	Ravg>97.0%	5 J/cm ² (10ns Pulse)

XeCl $\lambda = 308$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H06	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	308nm	12.7mm	0°	Ravg>99.5%	5 J/cm ² (10ns Pulse)
NB1-H06	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	308nm	25.4mm	0°	Ravg>99.5%	5 J/cm ² (10ns Pulse)

XeF $\lambda = 352$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H09	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	352nm	12.7mm	0°	Ravg>99.5%	5 J/cm ² (10ns Pulse)
NB1-H09	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	352nm	25.4mm	0°	Ravg>99.5%	5 J/cm ² (10ns Pulse)