

Nd:YAG 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:** 0.50 x 45° Both sides



External cavity high energy Nd:YAG laser mirrors are designed to withstand damage from high-power CW laser beams and high-peak-power laser pulses (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.

$\lambda = 262-266$ nm 4th Harmonic

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H04	\$ 110.00	£ 69.30	€ 102,30	¥ 1,050.50	262-266nm	12.7mm	0°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-H04	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	262-266nm	25.4mm	0°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-J04	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	262-266nm	25.4mm	45°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)

$\lambda = 349-355$ nm 3rd Harmonic

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB1-J08	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	349-355nm	25.4mm	45°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)

$\lambda = 524-532$ nm 2nd Harmonic

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H12	\$ 90.00	£ 56.70	€ 83,70	¥ 859.50	524-532nm	12.7mm	0°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-H12	\$ 150.00	£ 94.50	€ 139,50	¥ 1,432.50	524-532nm	25.4mm	0°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-J12	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	524-532nm	25.4mm	45°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)

$\lambda = 1047-1064$ nm Fundamental

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H14	\$ 110.00	£ 69.30	€ 102,30	¥ 1,050.50	1047-1064nm	12.7mm	0°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-H14	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	1047-1064nm	25.4mm	0°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-J14	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	1047-1064nm	25.4mm	45°	Ravg>99.7%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)

$\lambda = 532$ & 1064nm Dual Wavelength, Fundamental & 2nd Harmonic

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H13	\$ 140.00	£ 88.20	€ 130,20	¥ 1,337.00	532 & 1064nm	12.7mm	0°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-H13	\$ 200.00	£ 126.00	€ 186,00	¥ 1,910.00	532 & 1064nm	25.4mm	0°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)
NB1-J13	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	532 & 1064nm	25.4mm	45°	Ravg>99.5%	1 MW/cm ² CW, 5J/cm ² (10ns Pulse)

Kr-Ion Mirrors

The specifications for the Kr-Ion Mirrors are the same as those found above in the specifications box of the Nd:YAG mirrors.

Kr-Ion $\lambda = 520-647$ nm

ITEM #	\$	£	€	RMB	λ RANGE	DIAMETER	ANGLE OF INCIDENCE	REFLECTIVITY	DAMAGE THRESHOLD
NB05-H11	\$ 120.00	£ 75.60	€ 111,60	¥ 1,146.00	520-647nm	12.7mm	0°	Ravg>99.7%	1 kW/cm ² CW
NB1-H11	\$ 170.00	£ 107.10	€ 158,10	¥ 1,623.50	520-647nm	25.4mm	0°	Ravg>99.7%	1 kW/cm ² CW
NB1-J11	\$ 180.00	£ 113.40	€ 167,40	¥ 1,719.00	520-647nm	25.4mm	45°	Ravg>99.7%	1 kW/cm ² CW