

4.2. Nd:YVO4 Laser Crystals



Nd: YVO₄ is one of the best laser host crystals for diode pumped solid state.

Neodymium doped yttrium vanadate (Nd:YVO₄) is one of the most promising commercially available diode pumped solid state laser materials. It has high laser induced damage threshold and good mechanical in addition to optical properties. Its large stimulated emission cross-section and high absorption of pump laser make it a right crystal for pocket baby laser.

Nd: YVO₄ can produce IRgreen and blue laser by using minor different set-up. A broad absorption band centered at 807 nm and favourable mechanical properties make Nd:YVO₄ well suited for compact, efficient, high power diode-pumped lasers. Natural birefringence gives rise to a highly polarized output at 1064.3 and 1342 nm.

Standard specifications

Shape: rectangular or round
 Nd-concentration: 0.3-1 mol.% or other
 End surfaces: Righth angle cut or Brewster cut

When Ordering please specify

Shape: rectangular or round
 Dimensions: (width x height) or diameter, length mm
 Nd-concentration: 0.3-1 mol.% or other
 End surfaces: Righth angle cut or Brewster cut
 Description of AR coatings on Side 1 and Side 2

Code	Name	Material	Concentration	Height (mm)	Width (mm)	Length (mm)	Shape	End Surfaces	Coating	Price	Currency
LAC21	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	1	1	1	Rectangular		S1: AR@808 S2: AR@1064	39,000	JPY
LAC17	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	3	3	1	Rectangular		S1: HR914, AR808, AR1064, AR1340nm S2: HR1064, AR914	84,600	JPY
LAC18	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	3	3	3	Rectangular		S1: AR@808 HR@1064 S2: HT@808 AR@1064	78,000	JPY
LAC19	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	4	4	4	Rectangular		AR/AR @1064 nm	78,000	JPY
LAC22	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	5	22	2	Rectangular		S1: AR@808 S2: AR@1064	153,000	JPY
LAC20	Laser crystal	Nd:YVO4	0,1-4,0 Nd atm.%	3		27	Round		AR/AR @1064 nm	144,000	JPY