

# Nd:YAG Crystals



## Description

The Nd:YAG crystal is the most widely used solid-state laser material today. Good fluorescence lifetime, thermal conductivity and robust nature make Nd:YAG crystals suitable for high power continuous wave, high intensity Q-switched and single mode operation.

Now, we are able to supply consistently Nd:YAG rods with high optical homogeneity, high damage threshold, consistent performance and high processing accuracy.

## Features

- Wide absorption bandwidth
- Low lasing threshold
- High slope efficiency
- Large luminescence cross-section
- Linearly polarized emission and single-mode output

## Standard specifications

Orientation	[111]
Doping concentration	0.5-1.1 atm.%
Extinction ratio	>28 dB
Dimensions tolerance	+0/-0.1 mm
Length tolerance	±0.1 mm
Surface quality	10-5 S-D
Surface flatness	< $\lambda$ /10 @ 632.8 nm
Parallelism error	<10 arcsec
Perpendicularity	<10 arcmin
Protective chamfers	<0.1 mm x 45°

## Miscellaneous

- Custom design production is available
- Different doping levels available
- Rods with barrel grooving are available for better performance
- Mass production at 2000 pcs/month available
- Various end cuts available (plano/plano, wedge/wedge, brewster cut, etc.)
- Various dielectric coatings are available. Complex coatings are realized with IBS technique