

# LiNbO<sub>3</sub> Crystal

LiNbO<sub>3</sub> (LN) crystals have good mechanical properties, stability, and high optical uniformity. LN crystals are widely used in frequency octaves of wavelength  $>1~\mu m$ , as well as in OPO and QPM equipment. It can also be widely used in photoelectric regulators and waveguide materials as Q switches for Nd:YAG, Nd:YLF,

and Ti-doped sapphire lasers.

## **Main features:**

- Wide transparent range, high electro-optical efficiency
- Stable chemical and mechanical properties
- Small size, easy to grow into large crystals
- Low absorption loss, low damage threshold
- Not easy to deliquescence, high-temperature stability
- Large EO coefficient

# **Typical applications:**

- Laser target indicator
- Photoelectric Q switch
- Pulse rangefinder
- Laser medical applications, laser holography

# LN T%-nm Curve

## **Standard Products**

Model	Size (mm)	Tangential	Coating
LN 701	$6 \times 6 \times 25$	z-cut	AR/AR @ 1064 nm
LN 702	9 × 9 × 25	z-cut	AR/AR @ 1064 nm

For more information about products click on: www.voyawave.com

### **Technical Parameters**

Names of Parameters	Values & Ranges
Size tolerance	±0.05 mm
Dimension tolerance	≤ 0.5°
Clear aperture	> 90%
Surface quality	20/10
Flatness	< λ/8 @ 633 nm
Wavefront distortion	< \( \lambda \) 4 @ 633 nm
Parallelism	< 20 arc sec
Perpendicularity	< 5 arc min
Coating	AR
Size tolerance	1 year (under normal use)

See appendix P32 for more information