

Optical Lithium Niobate (LiNbO_3 , Mg:LiNbO_3 , Fe:LiNbO_3)

Optic waveguide Devices
Acousto-optic Devices
Electro-optic Devices
Holographic Memory
Laser Frequency Multipliers

Crystal Properties	Crystal Class	Trigonal
	Point Group	3m
	Space Group	R3c
	Lattice Parameter	a 0.5148, c 1.3863 nm
	Melting Point	1250 °C
	Density	4.64 g/cm ³
	Curie Temp	1160 °C
	Hardness	5.00 Mohs
	Transparency Range	370 ~ 5000 nm
	Electro-optic Coefficient	$r_{33} \approx 32 \times 10^{-12}$ m/V
	Refractive Index	n_o 2.286, n_e 2.200 (632.8 nm)
	Gradient of Refractive Index	$\leq 5 \times 10^{-5}$ /cm
	Transmittivity	$\geq 68\%$ (632.8 nm)

Specifications	Boules	Typical Diameter	$\varnothing 40 \pm 2 / \varnothing 50 \pm 2 / \varnothing 76 \pm 2$ mm
		Typical Length	100 / 80 / 60 mm
		Typical Orientation	X, Y, Z
		Crystal	LiNbO_3 , Fe:LiNbO_3
	Wafers	Typical Diameter	$\varnothing 35 \pm 0.5, \varnothing 50 \pm 0.5, \varnothing 76.2 \pm 0.5$ mm
		Typical Thickness	0.2 ~ 0.5 mm
		Typical Orientation	X, Y, Z
		Polish	0.016 μm
		Crystal	LiNbO_3 , Fe:LiNbO_3
	Slices (Rect.)	Typical Length	100
		Typical Orientation	X, Y, Z
		Polish	0.016 μm
		Crystal	LiNbO_3 , Fe:LiNbO_3

