

BIBO Crystal

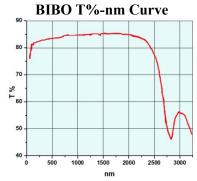
BiB₃O₆ (BIBO) is a newly developed NLO crystal. It has a large effective NLO coefficient and a high damage threshold. It's not easy to deliquescence BIBO crystal. The NLO coefficient of BIBO is about 3.5 to 4 times of LBO and 1.5 to 2 times of BBO. It means BIBO is an excellent multiplier crystal that can be used to produce blue light. In addition to standard products, VoyaWave Optics provides crystal devices of different sizes, concentrations, and frequency times on the basis of customer's needs (please consult to purchase).

Main features:

- Wide temperature receiving angle
- High dissolution multiplier conversion efficiency (9 times more than KDP)
- High damage threshold
- Wide range of transmittable wavelengths (286 -2500 nm)
- Good internal optical uniformity with less envelope
- Large electro-optical coefficient

Typical applications:

- Dyes, titanium gem lasers double frequency, triple frequency, sum frequency, difference frequency, etc.
- 1064 nm Nd: YAG lasers for double, triple, quadruple, and five octaves, etc.
- OPA & OPO, etc.



Standard Products

Model	Size (mm)	θ (°)	Φ (°)	Coating	bracket
BIBO 801	5 × 5 × 0.5	143.7	90	AR/AR @ 1030+515 nm	Ø25.4mm
BIBO 802	5 × 5 × 0.5	143.7	90	AR/AR @ 1030+515 nm	Not installed

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

Technical Parameters

Names of Parameters	Values & Ranges	
Size tolerance	±0.1 mm	
Dimension tolerance	$\Delta\theta$ < 0.5°, $\Delta\phi$ < 0.5°	
Clear aperture	> 90%	
Surface quality	20/10 after 10/5 membrane	
Flatness	< λ/10 @ 633 nm	
Wavefront distortion	< \(\lambda / 8 \) @ 633 nm	
Parallelism	< 20 arc sec	
Perpendicularity	< 5 arc min	
Coating	-	
Size tolerance	1 year (under normal use)	

See appendix P31 for more information