

- Dopant Concentration: 0.5 -25at%
- Orientation: [111] or [100] within 5°
- Diameter: 1~20 mm,
- Length: 5~150 mm
- Scratch & Dig: 10/5
- Flatness: $\lambda/10$
- parallelism: 10 arc Sec
- Coating: AR/AR@1030nm,R<0.25%

Ytterbium-doped YAG (Yb:YAG) is an active laser medium lasing at 1030 nm, with a broad, 18 nm wide absorption band at 940 nm. It is one of the most useful media for high-power diode-pumped solid state lasers. The dopant levels used range between 0.2% and 30% of replaced yttrium atoms. Yb:YAG has very low fractional heating, very high slope efficiency, and no excited-state absorption or up-conversion, high mechanical strength and high thermal conductivity. Yb:YAG can be pumped by reliable InGaAs laser diodes at 940 or 970 nm.

Yb:YAG is a good substitute for 1064 nm Nd:YAG in high-power applications, and its frequency-doubled 515 nm version can replace the 514 nm argon lasers.