

Nano4th frequency converter

Nano4th is an ultra compact platform that converts your femtosecond low-energy IR laser pulses (nJ-range) into 2nd and 4th harmonics with best-in-class conversion efficiency. Its industrial-grade design makes it a robust and reliable solution that will extend the capabilities of your laser. The design is easily adaptable to higher pulse energies, up to μJ or mJ level.

Nano4th



Key features

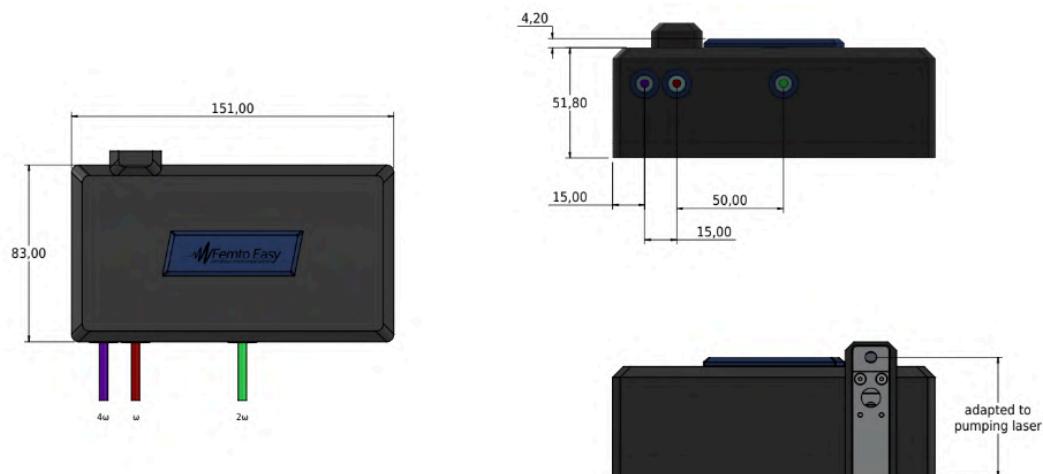
- ⦿ Ultra compact, industrial-grade platform : sealed, nitrogen purged
- ⦿ High conversion efficiency of low-energy pulses (nJ level)
- ⦿ Wavelength change from 3 outputs, within seconds : fundamental, 2nd and 4th harmonics
- ⦿ All-in-one design. Laser and conversion unit are combined into one single robust assembly
- ⦿ Alignment free. No software needed

Specifications

	1064 nm	532 nm		266 nm
Power	2 W	1 W ¹	750 mW ¹	170 mW
Repetition rate			80 MHz	
Conversion efficiency	n/a	> 45%	> 35%	> 8%
Pulse duration	< 120 fs	< 120 fs	< 65 fs	< 60 fs (estimated)
Polarization	vertical		horizontal	vertical

¹ Laser operation mode can be switched between long/short pulse, leading to two different output power at 532 nm. This table shows an example of typical performance for a specific laser. For a different laser type and/or different specifications, the Nano4th will be adapted by our team for best conversion efficiency.

Dimensions



Integration example

