

# Nano4<sup>th</sup> frequency converter

Nano4<sup>th</sup> is an ultra compact platform that converts your femtosecond low-energy IR laser pulses (nJ-range) into  $2^{nd}$  and  $4^{th}$  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  $\mu J$  or mJ level.





#### 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, 2<sup>nd</sup> and 4<sup>th</sup> harmonics
- All-in-one design. Laser and conversion unit are combined into one single robust assembly
- ◆ Alignment free. No software needed

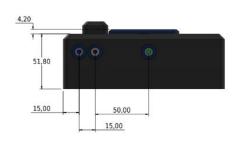
### **Specifications**

	1064 nm	532 nm		266 nm
Power	2 W	1 W <sup>1</sup>	750 mW¹	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

<sup>&</sup>lt;sup>1</sup>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 Nano4<sup>th</sup> will be adapted by our team for best conversion efficiency.

#### **Dimensions**







## Integration example

