



Levante IR^{NSP} - ps version

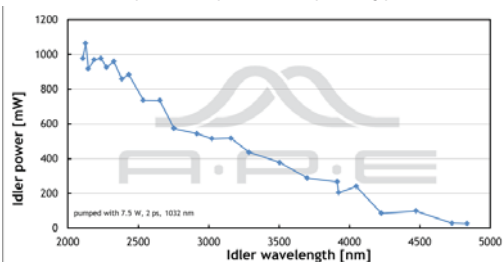
The Levante IR^{NSP} ps is a synchronously pumped OPO (optical parametric oscillator) with a mode-locked picosecond laser emitting at 1 μm as fixed wavelength pump source. Its housing, inner control electronics and software were completely new developed for easier handling and automated control.

The accessible wavelength range for the Signal output is 1315 ... 2000 nm and the wavelength range for the optional Idler output is 2150 ... 4800 nm (when pumped @ 1031 nm). This is ideal for applications that require tunable light in the IR, e. g. vibrational spectroscopy.

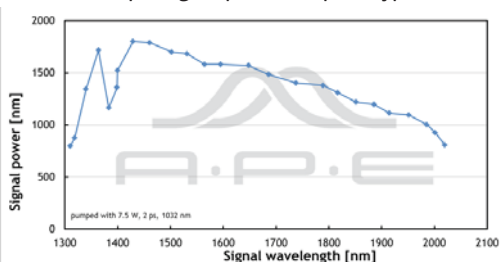
The OPO comes with a periodically poled FAN crystal as gain medium. Due to the new platform tuning will be automated and can be controlled via software. A TCP / IP interface is available as well.

The Levante IR^{NSP} ps is a versatile narrow bandwidth light source for picosecond pulses. When combined with extra-cavity SHG (Second Harmonic Generation), THG (Third Harmonic Generation) and DFG (Difference Frequency Generation) wavelength converters of the HarmoniXX series, almost every wavelength from 660 nm up to 15 μm can be generated.

Levante IR ps: Idler power output - typical data



Levante IR ps: Signal power output - typical data



- Output pulses perfectly synchronized in time
- Computer controlled wavelength tuning
- Standardized Software Interface
- Integrated spectrometer for OPO Signal wavelength range



pump laser not depicted

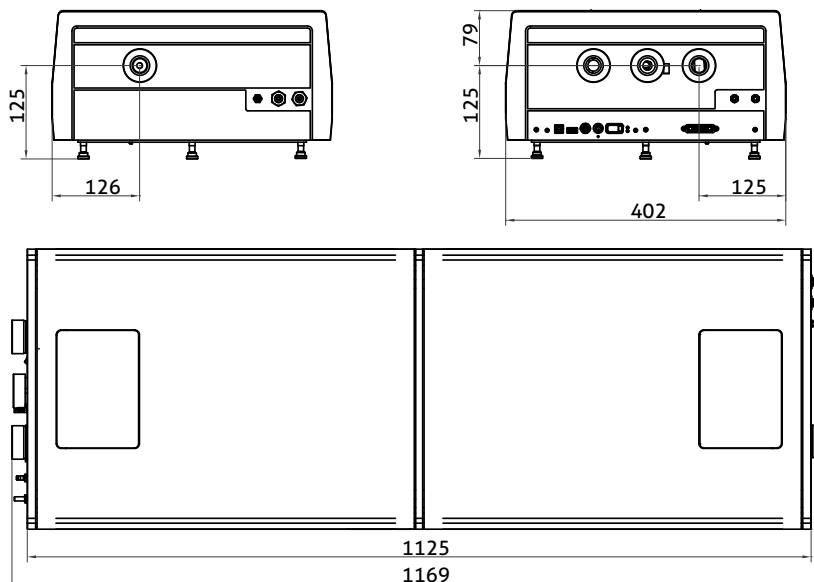
Specifications

Wavelength range (Signal)	1315 ... 2000 nm @ 1032 nm	
Output power (Signal)	1500 nm > 1.5 W @ 7.5 W, 2 ps	> 2 W @ 10 W, 6 ps pump; 1032 nm
Pulse width	typ. 2 ps @ 2 ps pump	
Time bandwidth product	typ. 0.6	
Pulse repetition rate	approx. 80 MHz (depending on and equal to the repetition rate of the pump laser)	
Idler wavelength range (optional)	2150 nm ... 4800 nm @ 1032 nm	
Idler output power (optional)	2500 nm > 0.6 W @ 7.5 W, 2 ps	> 0.8 W @ 10 W, 6 ps pump; 1032 nm
Appropriate pump parameters	2 ... 10 W 1030 ... 1064 nm 1 ... 10 ps 75 ... > 80 MHz repetition rate (fixed at time of order)	

Options

- Output of Idler beam
- DFG up to 15 μm
- Adaptation to other pump parameters
- SHG Signal
- SHG Idler

Dimensions (in mm)



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