



Levante IR^{NSP} - fs version

The new Levante IR^{NSP} - fs is a synchronously pumped OPO (optical parametric oscillator) in an innovative new design. The pump source is a mode-locked femtosecond laser emitting at 1 μm fixed. The generation of the Signal and Idler pulses in a parametric process is jitter-free with respect to each other as well as to the pump pulse.

The accessible wavelength range for the Signal output is 1320 ... 2000 nm and the wavelength range for the Idler output (optional) is 2150 ... 4800 nm (when pumped @ 1035 nm). The wavelength tuning itself is now fully automated.

The OPO is ideal for applications requiring tunable light in the IR, e. g. vibrational spectroscopy. Due to a periodically poled FAN crystal as gain medium there is no need for temperature tuning. With the entirely new designed electronics and Control Software the handling has never been easier. Also the new platform allows for best customer support through remote access and extensive log files. A TCP / IP interface makes integration into larger software controlled setups easy.

The Levante IR^{NSP} - fs is a versatile light source for femtosecond pulses. In combination with extracavity wavelength converters of the HarmoniXX series, almost every wavelength from 660 nm up to 15 μm can be generated.

- Fully controllable via PC and automated wavelength tuning
- Perfectly synchronized output pulses
- Standardized Software Interface (using TCP / IP)
- Integrated spectrometer for OPO Signal wavelength range



pump laser not depicted

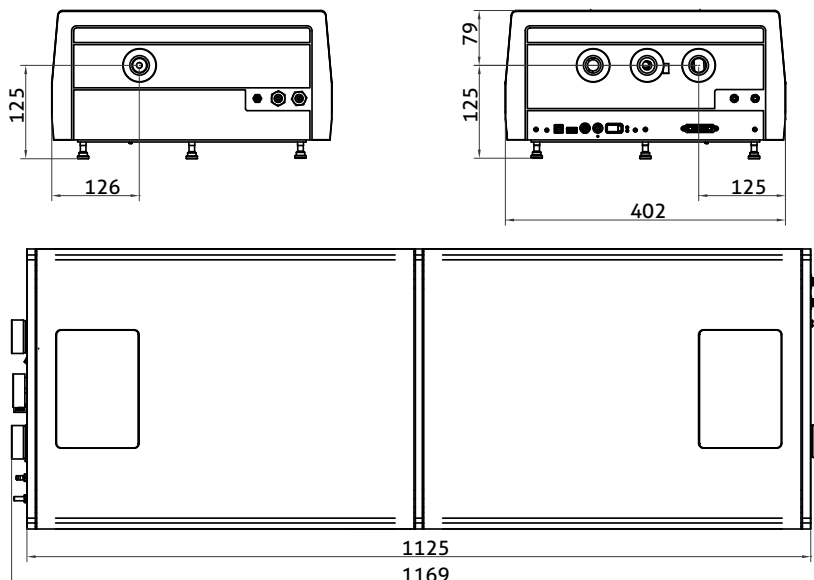
Specifications

Wavelength range (Signal)	1320 ... 2000 nm
Wavelength range (Idler, optional)	2150 ... 4800 nm
Output power (Signal)	1500 nm > 1.2 W @ 6 W pump; 1035 nm
Output power (Idler, optional)	2500 nm > 0.6 W @ 6 W pump
Pulse width	typ. 200 fs @ 200 fs 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)
Computer interface	Standardized Software Interface (using TCP / IP)
Appropriate pump parameters	2 ... 10 W 1030 ... 1064 nm 70 ... 300 fs 40 ... > 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)



Contact:
 APE Angewandte Physik & Elektronik GmbH
 Plauener Str. 163-165 | Haus N | 13053 Berlin | Germany
 T: +49 30 986 011-30 | E: sales@ape-berlin.de | www.ape-berlin.de
 or

APE America (for the Americas)
 45401 Research Avenue | Suite 141 | Fremont, CA 94539 | USA
 T: +1 (888) 690 3250 | E: sales@ape-america.com | www.ape-america.com

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