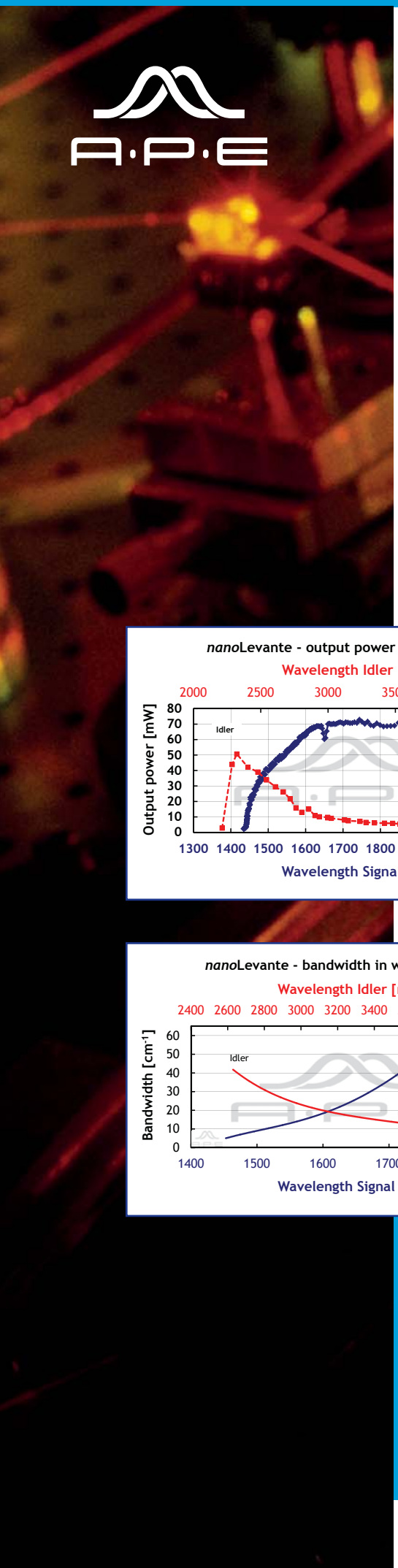

*nano*Levante™

The ***nano*Levante**™ is a new kind of compact nanosecond optical parametric oscillator (OPO) in a new pulse parameter regime – generating light in the Near Infrared (NIR) and Middle Infrared (MIR) region.

The ***nano*Levante**™ is pumped by a compact industrial grade passively Q-switched YAG laser, providing pump pulses at the level of several microjoules with multi-kHz repetition rate.

The ***nano*Levante**™ offers widely tunable light in the IR region from 1.45 ... 1.96 µm (Signal) and from 2.3 ... 4.2 µm (Idler) with an average output power in the milliwatt range and pulse energies at microjoule level.

The tuning of the wavelength is implemented via moving an optical element with a factory calibrated stepper motor with a minimum step size corresponding to a sub-nm wavelength resolution. Operation via the easy to use Control Software allows to set the wavelength and repetition rate as well as to open and close the shutter and filters. Capability for remote operation via LAN is also implemented.

The Signal power is internally monitored and displayed in the Control Software. When external monitoring of the wavelength is required, this can be facilitated via a fiber optic output port, which delivers the sum frequency of Signal and pump for measuring with a simple CCD-spectrometer.

The repetition rate may be changed to any value between single shot ... 20 kHz by either internal or external trigger. With its integrated pump laser, single software interface, and green pilot beam the ***nano*Levante**™ is a compact, easy to use device for many applications replacing multiple individual light sources.

- Computer controlled tuning / Operation via LAN
- Wavelength monitoring port (sum frequency in the visible range)
- Power monitoring
- Wide tuning range
- Single shot capability
- External trigger
- Excellent beam quality
- Green pilot beam

nanosecond kHz IR pumped OPO

Specifications

Tuning range	1.45 ... 1.96 µm (Signal) and 2.3 ... 4.2 µm (Idler)	
Spectral resolution	1 nm	
Pulse width	< 1.5 ns	
Repetition rate	single shot[1] ... 20 kHz	
Trigger	internal or external (TTL), single shot ... 20 kHz	
Trigger output	TTL (when internally triggered)	
Average output power @ 20 kHz	Signal	Idler
	1450 ... 1515 nm > 10 mW	2300 ... 2700 nm > 20 mW
	1515 ... 1960 nm > 40 mW	2700 ... 3500 nm > 5 mW
		3500 ... 4200 nm > 0.5 mW
Pulse energy @ 20 kHz	> 3.5 µJ @ 1750 nm (Signal)	> 2.5 µJ @ 2320 nm (Idler)
Power input	12 V DC, 100 W | 100 ... 240 V AC, 50 ...60 Hz external adapter included	

Compatibility of the Control Software with Windows 8 operating system is being tested.
1) Pulse energy may vary at repetition rates < 8 kHz, but is constant at one chosen repetition rate.

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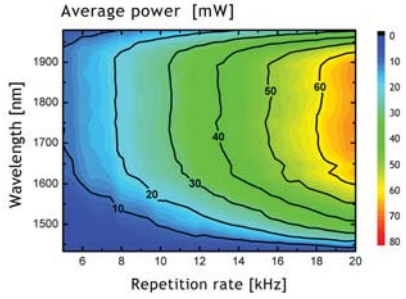
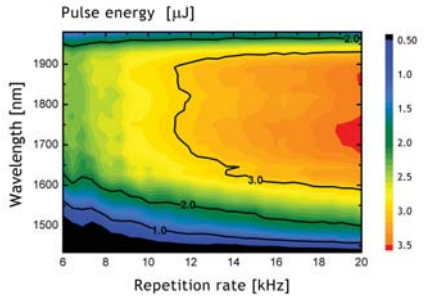
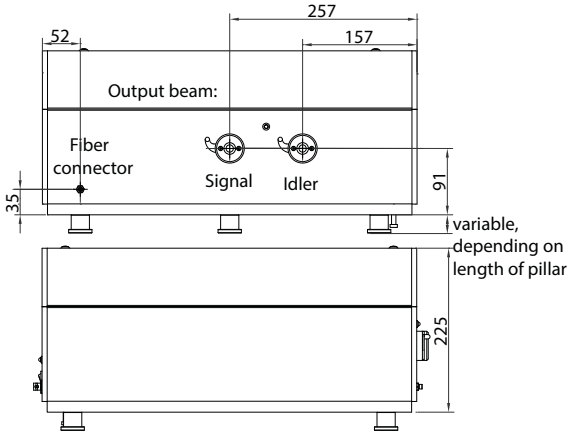




Dimensions (in mm)

500 x ca. 230 x 500 (W x H x D)



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Therefore, specifications are subject to change without notice.
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