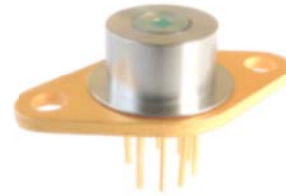


Fabry Perot Lasers: 3000 nm - 6000 nm



nanoplus offers FP interband cascade lasers at any wavelength between 3000 nm and 6000 nm.

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Key features of nanoplus FP interband cascade lasers

- spectral multimode
- lateral single mode
- continuous wave
- room temperature
- custom wavelengths

Why choose nanoplus FP interband cascade lasers

- precise selection of target wavelength
- typically > 5 mW output power
- small size
- easy usability
- high efficiency
- long-term stability

For more than 15 years nanoplus has been the technology leader for lasers in gas sensing. We produce lasers at large scale at our own fabrication sites in Gerbrunn and Meiningen. nanoplus cooperates with the leading system integrators in the TDLAS based analyzer industry. More than 20,000 installations worldwide prove the reliability of nanoplus lasers.

Quick description of nanoplus FP laser technology

nanoplus uses a unique and patented technology for FP laser diode manufacturing. We follow a ridge waveguide approach, which is independent of the material system.

Related Information for nanoplus FP ICLs between 3000 nm and 6000 nm

Specifications

The following table summarizes the typical FP laser specifications in the 3000 nm to 6000 nm range:

parameters (T = 25 °C)	symbol	unit	min	typical	max
wavelength precision	δ	nm		+ / - 20	
optical output power	Pout	mW		5	
forward current If		mA		100	
threshold current	Ith	mA	50	60	70
reverse voltage	Ur	V		7	
slope efficiency	e	mW / mA	0.08	0.1	0.12
slow axis (FWHM)		degrees	20	30	40
fast axis (FWHM)		degrees	40	50	60
storage temperature	TS	°C	-40	+20	+80
operational temperature	TC	°C	-20	+25	+50

at case

nanoplus FP lasers show outstanding spectral and electrical properties. They are demonstrated in figures 1 and 2.

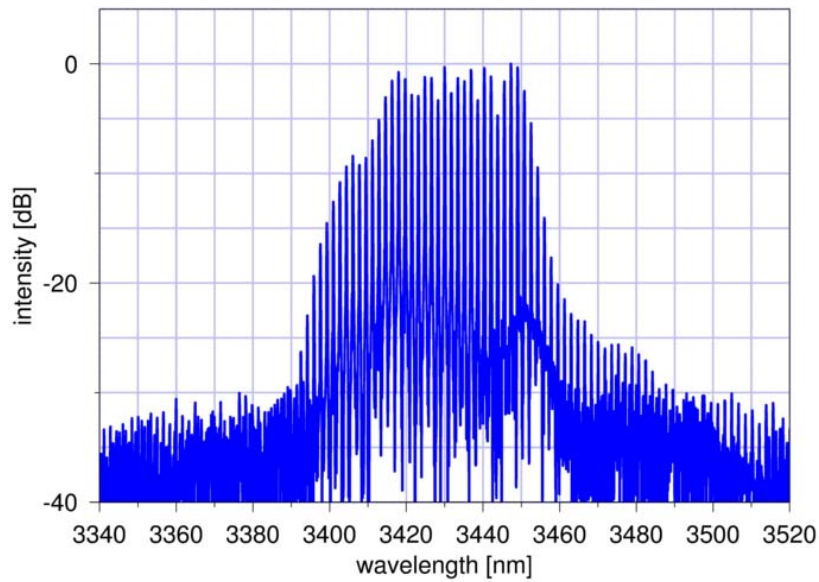


Figure 1: Spectrum of nanoplus 3400 nm FP interband cascade laser

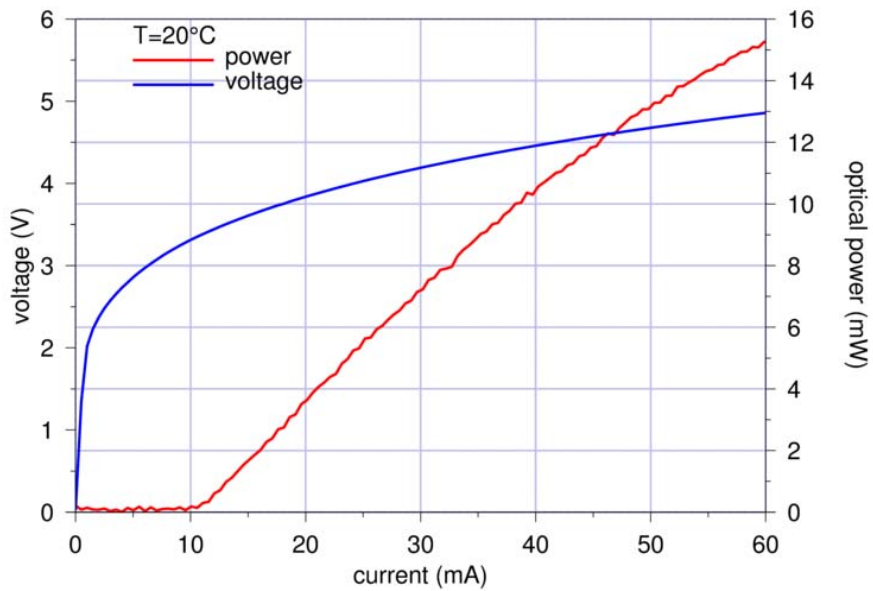


Figure 2: Typical power, voltage and current characteristics of nanoplus 3400 nm FP interband cascade laser

If you are uncertain whether you require a FP laser, compare the specifications with our Distributed Feedback Lasers or contact us.