

# Fabry-Pérot Laser Diodes (FP): High-Power Option

## WAVELENGTH

760–840 nm

840–1100 nm

1100–1700 nm

1700–2400 nm

2400–2900 nm

2800–6500 nm

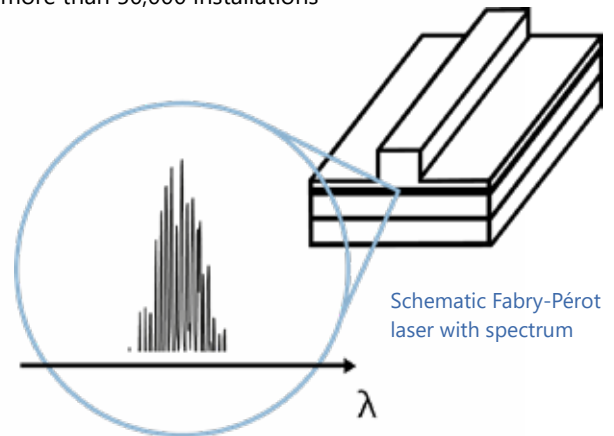
6000–14000 nm

**High-Power OPT**

nanoplus Fabry-Pérot Lasers (**FP**) are specially designed and characterized to fit your requirements. For 25 years, nanoplus has been manufacturing DFB and FP lasers with excellent performance. Our devices **operate** reliably in more than 50,000 installations worldwide.

## Key features:

- HIGH-POWER
- BROADBAND
- SMALL FOOTPRINT



Any **custom wavelength** is possible: You tell us what you need! With our outstanding technology we design any wavelength **between 1950 nm and 2350 nm** with an accuracy of +/- 20 nm. Other wavelengths are available on request.

The **output power** of **up to 1 W** yields a strong signal and gives large flexibility to your application.

**Long-term stability** is one of the principal features customers value about our lasers!

Even in **harsh environments** nanoplus devices perform excellently – low maintenance warranted.

**“Do not change your ideas, let us deliver the laser that fits your application.”**

If you require **custom specifications**, please contact us. Nearly 80 % of our devices are more or less customer-specific.

As nanoplus is a **fully vertically integrated company**, we control the entire process chain from design to packaging.

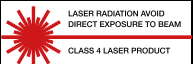
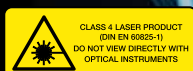
Both nanoplus production facilities are based in **Germany**. To guarantee consistent product quality we apply a strict and **ISO certified quality management system** at all levels.

Our sales and R&D teams have long-standing experience in developing lasers. They will advise you in your design and realization phase as well as after-sales:

**We make market leaders!**



nanoplus high-power  
Fabry-Pérot laser on  
submount with AlN carrier

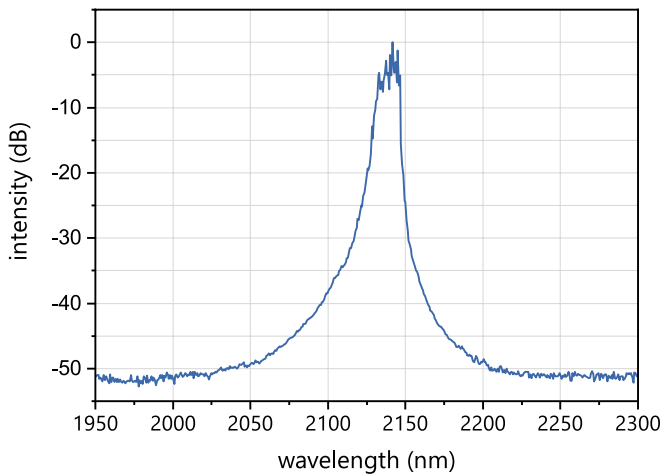


# Typical Specifications: High-Power Option

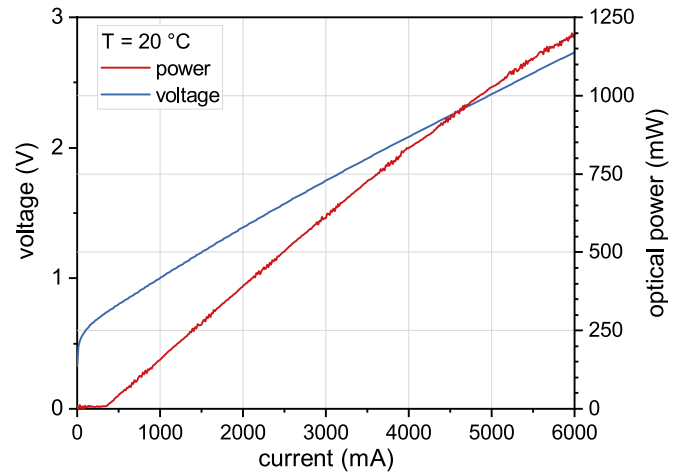
This data sheet reports performance data of a **sample High-Power Fabry Pérot Laser at 2145 nm**, which is representative for all wavelengths between 1950 nm and 2350 nm with **high-power option**.

For standard specifications with less power, please refer to our low power section:

[nanoplus.com/FP/1700nm-2400nm](https://nanoplus.com/FP/1700nm-2400nm).



Typical room temperature cw spectrum  
of a nanoplus HPFP laser at 2145 nm



Typical PI and VI curve  
of a nanoplus HPFP laser at 2145 nm

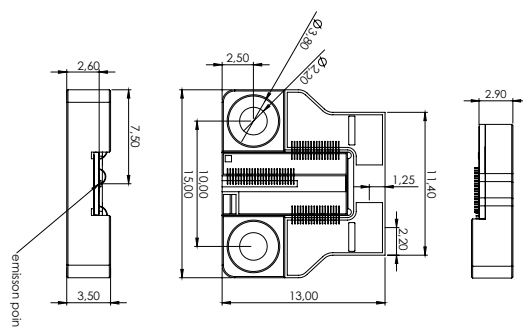
electro-optical characteristics	symbol	unit	min.	typical	max.
operating wavelength (at $T_{op}$ , $I_{op}$ )	$\lambda_{op}$	nm	-20	please specify	+20
optical output power (at $\lambda_{op}$ )	$P_{op}$	mW		1000	
operating current	$I_{op}$	mA		5000	
operating voltage	$V_{op}$	V		2.5	
threshold current	$I_{th}$	mA		300	
operating chip temperature*	$T_c$	°C	+15	+20	+40
storage temperature*	$T_s$	°C	-40	+20	+80

\* non condensing

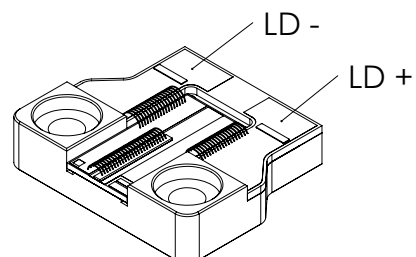
## packaging

submount with AlN carrier, without TEC, without NTC

Technical drawings & accessories are available at: [nanoplus.com/packaging](https://nanoplus.com/packaging)



Technical drawing  
of submount with  
AlN carrier



Please contact [sales@nanoplus.com](mailto:sales@nanoplus.com) for customized specifications, quotes and further questions.

Visit our website for technical notes, application samples or literature referrals.