# Fabry-Pérot Laser Diodes (FP): 760 nm - 840 nm



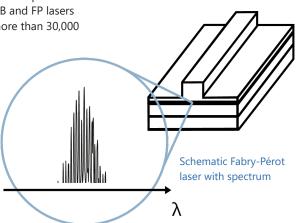
#### WAVELENGTH

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 FPs are specially designed and characterized to fit your requirements. For more than 20 years, nanoplus has been manufacturing DFB and FP lasers with excellent performance. Our devices operate **reliably** in more than 30,000 installations worldwide.

### **Key features:**

- BROADBAND
- HIGH-POWER
- SMALL FOOTPRINT



Any **custom wavelength** is possible: You tell us what you need! With our outstanding technology we design any wavelength **between 760 nm and 2900 nm** with an accuracy of +/- 20 nm.

The **output power** of **several mW** yields a strong signal and gives large flexibility to your application. High power up to 1 W for diverse applications is available on request.

We offer **various packaging options**, e. g. several free space housings including TEC and NTC, fiber coupling, **collimation** and **custom designs**. What are your requirements?

**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 a laser that fits your application."

If you require **custom specifications**, please contact us. Nearly 80 % of our devices are more or less customerspecific. 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 be pleased to provide advice at any time - rely on us from design stage to product realization as well as after-sales:

We make market leaders!



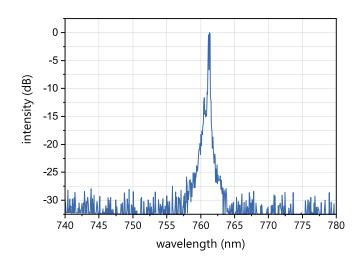


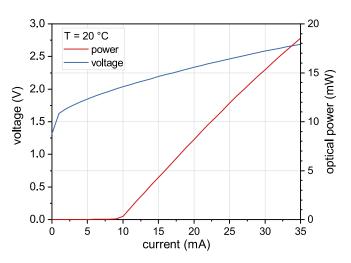
# Typical Specifications: 760 nm - 840 nm



This data sheet reports performance data of a **sample Fabry-Pérot laser at 761 nm**, which is representative for the entire wavelength range.

If you need more power, please check our High-Power Option: http://www.nanoplus-usa.com/products/FP





Typical room temperature cw spectrum of a nanoplus FP laser at 761 nm Typical PI and VI curve of a nanoplus FP laser at 761 nm

electro-optical characteristics	symbol	unit	min.	typ	max.
operating wavelength (at $T_{_{op'}} I_{_{op}}$ )	$\lambda_{_{op}}$	nm	-20	761	+20
optical output power (at $\lambda_{_{op}}$ )	P <sub>op</sub>	mW		10	
operating current	I <sub>op</sub>	mA		30	
operating voltage	V <sub>op</sub>	V		3	
threshold current	I <sub>th</sub>	mA		50	
operating chip temperature	T <sub>op</sub>	°C	+20	+25	+50
operating case temperature*	T <sub>c</sub>	°C	-20	+25	+50
storage temperature*	Τ <sub>s</sub>	°C	-40	+20	+80

### laser packaging options

\* non condensing

TO5 with TEC and NTC, black cap, AR coated window TO56 without TEC or NTC, sealed, window c-mount or other submounts without TEC or NTC butterfly package with TEC and NTC, SM fiber, FC/APC connector chip on carrier without TEC, with NTC

Technical drawings & accessories are available at: https://www.nanoplus-usa.com/products/packaging

Please contact <u>victor.perez@nanoplus.com</u> for customized specifications, quotes and further questions. Visit the <u>nanoplus website</u> for technical notes, application samples or literature referrals. nanoplus America Inc. nanoplus-usa.com, phone: +1-720-453-2454, email: victor.perez@nanoplus.com <sup>®</sup>copyright nanoplus America Inc. 2021, all rights reserved. Technical data is subject to change without notice.