

# Superluminescent Diodes (SLD): 1700 nm - 2300 nm

## WAVELENGTH

760–1100 nm

1100–1700 nm

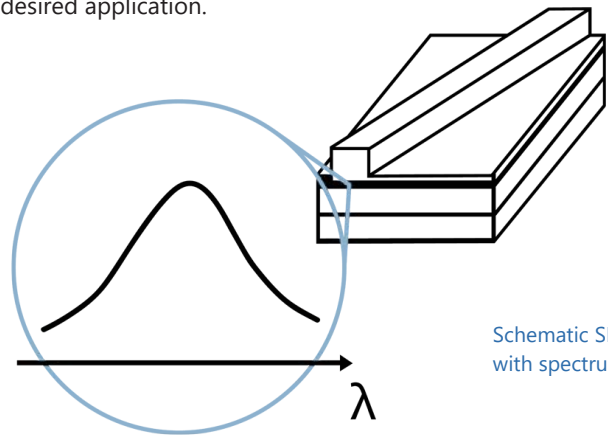
**1700–2300 nm**

2300–2900 nm

If you are looking for a combination of high brightness and low coherence, one of our nanoplus SLD is the light source of choice. Its emission peak can be freely selected in the range between 760 and 2900 nm to suit any desired application.

## Key features:

- BROADBAND
- HIGH-POWER
- SMALL FOOTPRINT



Schematic SLD  
with spectrum

Any **custom wavelength** is possible: You tell us what you need and we deliver it. With our outstanding technology we design any wavelength **between 760 nm and 2900 nm** with an accuracy of +/- 10 nm.

Our SLD exhibit a **large spectral width** up to 80 nm around the specified centre wavelength.

The **high output power** of **several mW** leads to a stronger signal and increases your measurement precision. Low power for diverse applications is available on request.

We offer **various packaging options**, e. g. several free space housings including TEC and NTC, fiber coupling and **custom designs**. You tell us what you need!

**Long-term stability** is what our customers really want! Even in **harsh environments** nanoplus devices perform excellently – low maintenance warranted.

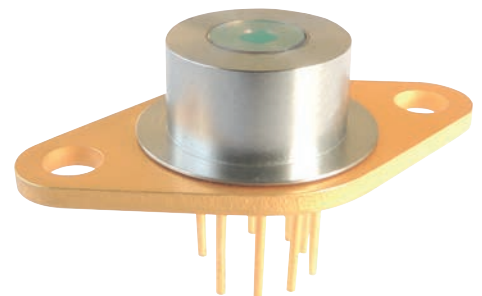
**“Do not change your ideas, let us deliver the SLD that fits your application.”**

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 whole 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!**

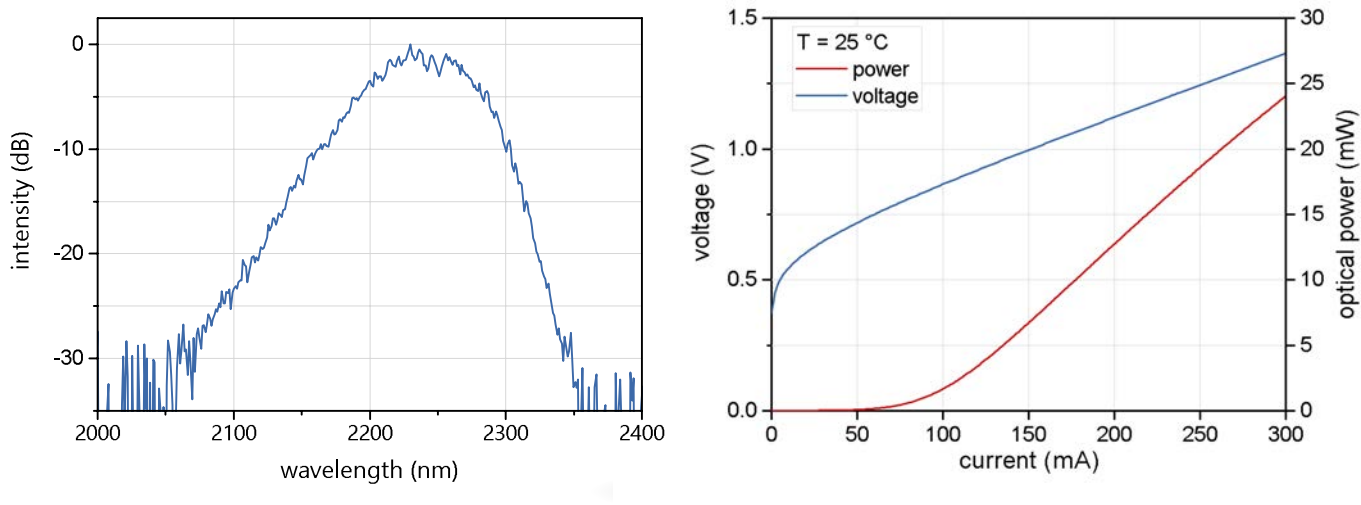


TO66 with TEC and NTC,  
sealed with cap and AR  
coated window



# Typical Specifications: 1700 nm - 2300 nm

This data sheet reports performance data of a **sample SLD at 2245 nm**, which is representative for the entire wavelength range.



Typical room temperature cw spectrum  
of a nanoplus SLD at 2245 nm

Typical PI and VI curve  
of a nanoplus SLD at 2245 nm

electro-optical characteristics	symbol	unit	min.	typ	max.
operating wavelength (at $T_{op}$ , $I_{op}$ )	$\lambda_{op}$	nm	2235	2245	2255
optical output power (at $\lambda_{op}$ )	$P_{op}$	mW		15	
operating current	$I_{op}$	mA		300	
operating voltage	$V_{op}$	V		2	
spectral bandwidth (FWHM)	$\Delta \lambda$	nm		80	
current tuning coefficient	$C_I$	nm / mA	0.04	0.08	0.16
temperature tuning coefficient	$C_T$	nm / K	1.1	1.4	1.7
operating case temperature*	$T_c$	°C		+25	
storage temperature*	$T_s$	°C	-40	+20	+80

\* non condensing

## packaging

- chip on carrier
- TO66 with TEC and NTC, sealed, AR coated window
- butterfly housing with SM fiber
- Other packaging options may be discussed on request.

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

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.