Superluminescent Diodes (SLD): 1700 nm - 2300 nm

nanoplus SLDs 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: the same technology is used for our SLDs which we offer at any wavelength between 760 nm and 2900 nm.

Key features:

- BROADBAND
- HIGH-POWER
- SMALL FOOTPRINT

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 SLDs 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, collimation 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.

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!

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

<table>
<thead>
<tr>
<th>electro-optical characteristics</th>
<th>symbol</th>
<th>unit</th>
<th>min.</th>
<th>typ</th>
<th>max</th>
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<tbody>
<tr>
<td>operating wavelength (at $T_{op}$, $I_{op}$)</td>
<td>$\lambda_{op}$</td>
<td>nm</td>
<td>2235</td>
<td>2245</td>
<td>2255</td>
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<td>optical output power (at $\lambda_{op}$)</td>
<td>$P_{op}$</td>
<td>mW</td>
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<tr>
<td>operating current</td>
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<td>mA</td>
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<td>300</td>
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<tr>
<td>operating voltage</td>
<td>$V_{op}$</td>
<td>V</td>
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<td>spectral bandwidth (FWHM)</td>
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<td>current tuning coefficient</td>
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<td>temperature tuning coefficient</td>
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<td>operating case temperature*</td>
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<tr>
<td>storage temperature*</td>
<td>$T_s$</td>
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<td>+20</td>
<td>+80</td>
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</table>

* non condensing

laser packaging options

chip on carrier

TO66 with TEC and NTC, sealed, AR coated window

butterfly housing with SM fiber

collimation for TO66

Other packaging options may be discussed on request.

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

Please contact sales@nanoplus.com for customized specifications, quotes and further questions. Visit our website for technical notes, application samples or literature referrals.