Laser diodes & turn-key solutions from 1270 to 1650 nm
Standard singlemode DFB or Bragg laser diodes from 10 to 400 mW are offered as stock items or associated with a CW or nanosecond pulsed turn-key driver. Multimode solutions up to 30 W are also offered coupled in a 105µm-core fiber.

### Choose your Laser Diode:

<table>
<thead>
<tr>
<th>Diode Model*</th>
<th>Power (CW)</th>
<th>Power (Pulse, typ)</th>
<th>Technology</th>
<th>Wavelength (nm)</th>
<th>Fiber</th>
<th>Emission Bandwidth (typ)</th>
<th>Form-factor</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 mW</td>
<td>20 mW</td>
<td>Single mode DFB **</td>
<td>Many wavelength available between 1270 and 1650 nm (see the table on website page for exact power vs wavelength)</td>
<td>SMF or PM versions available</td>
<td>~100 kHz **</td>
<td>14-pin Butterfly-type 1 (other pin configuration available on demand)</td>
</tr>
<tr>
<td>2</td>
<td>40 mW</td>
<td>80 mW</td>
<td>Single mode Fabry-Perrot or Bragg</td>
<td>1400 and 1500 nm (only)</td>
<td>PM Only</td>
<td>~0.2 nm</td>
<td>14-pin Butterfly-type 1</td>
</tr>
<tr>
<td>3 or 4</td>
<td>100 mW</td>
<td>200 mW</td>
<td>Single mode Fabry-Perrot or Bragg</td>
<td>1400 and 1500 nm (only)</td>
<td>PM Only</td>
<td>~0.2 nm</td>
<td>14-pin Butterfly-type 1</td>
</tr>
<tr>
<td>5/6/7/8</td>
<td>20/40 mW</td>
<td>20/40 mW</td>
<td>DFB - Ultra-narrow linewidth</td>
<td>1470 nm</td>
<td>105 µm core, SMF-22</td>
<td>~ 10 nm</td>
<td>80<em>80</em>25 mm³</td>
</tr>
</tbody>
</table>

* Not all laser diode types and versions are available at each wavelength. The model number depends on the product wavelength: see the product webpages by wavelength for detailed information (from 1310 nm to 1650 nm) and scroll down to see all configurations and prices.

### Choose your Driver Performance:

<table>
<thead>
<tr>
<th>Laser Diode Version</th>
<th>CW Driver (for singlemode diodes)</th>
<th>Pulse &amp; CW Driver (from 1 ns to CW - CCS-CW is the open driver and CCSI-CW is the integrated version)</th>
<th>User design pulse shape Driver (from 0.5 ns to 8 µs - CCS-based is the open driver and SHAPER-I is the integrated version)</th>
<th>High power driver for multimode diodes (30W) - CCSM is the open frame driver and CCMI is the turn-key version</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10 mW</td>
<td>10 mW / No</td>
<td>10 mW / 15 mW</td>
<td>No / 15 mW</td>
</tr>
<tr>
<td>2</td>
<td>40 mW</td>
<td>40 mW / No</td>
<td>40 mW / 60 mW</td>
<td>No / 60 mW</td>
</tr>
<tr>
<td>3</td>
<td>100 mW</td>
<td>100 mW / No</td>
<td>100 mW / 150 mW</td>
<td>No / 150 mW</td>
</tr>
<tr>
<td>4</td>
<td>400 mW</td>
<td>400 mW / No</td>
<td>400 mW / 400 mW</td>
<td>No / 400 mW</td>
</tr>
<tr>
<td>5/6</td>
<td>20-40 mW</td>
<td>Ultra-narrow wavelength linewidth DFB models - see the 1550 nm product webpage - requires a special ultra low noise laser diode driver (not shown here).</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7/8</td>
<td>15/30 W</td>
<td>No</td>
<td>15 / 30 W</td>
<td></td>
</tr>
</tbody>
</table>

### Output Power - CW / Pulse (Typical values)

- Laser diode T°: Any 15 - 50 °C, 15-40°C
- Pulse duration (Ext trigger): 0.5 ns - CW
- Pulse duration (Internal pulse generator): 0.5 ns - 500 ns
- Temp rise/fall time (Min pulse duration): 3 (ns/A) ; 1.5 ns < 1ns/A ; 1.5 ns few µsec
- Internal temp rate adjustment: 1 Hz - 4 MHz (250 MHz optional) 1 Hz - 20 MHz
- Temporal Jitter: < 8 ps < 2 ns (8 ps with clock synchronization)
- Adj. CW offset (pulse regime): Optional No Yes (external mode)

### Interface/GUI/libraries:

- USB - Windows 7/10 - DLLs - Hexa/Linux - Labview - Python
- CCS-CW
- CCS-std/HP
- SHAPER-I
- CCSI-CW/ std/HP
- CCM
- SHAPER
- CCSI-CW/ std/HP
- CCMI

AeroDiode offers a wide range of fiber-coupled DFB, Fabry-Perrot, or multi-emitters laser diode solutions and turn-key drivers. These solutions are designed to meet the needs of various industries, including medical, scientific research, and industrial applications. Choose from a vast selection of laser diodes and driver performance options to find the perfect solution for your project.

Visit our website at www.aerodiode.com to explore our full range of products and services, or contact us directly to discuss your specific requirements.

*www.aerodiode.com*
GUI (examples)

Classification :

<table>
<thead>
<tr>
<th>Name</th>
<th>1550 LD :</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wavelength</td>
<td>Choose any wavelength between 1270 and 1650 nm (models 1-3) or between 1420 and 1500 nm (model 4) (note : only the 1310, 1550 and 1650 nm DFBs are available with 100 mW CW power)</td>
</tr>
</tbody>
</table>
| Diode model*    | 1: 10 mW DFB Butterfly singlemode  
2: 40 mW DFB Butterfly singlemode  
3: 100 mW DFB singlemode*  
4: 400 mW Bragg singlemode*  
5: 20 mW DFB (Ultra narrow emission wavelength)*  
6: 40 mW DFB (Ultra narrow emission wavelength)*  
7: 15 W Multimode*  
8: 30 W Multimode* |
| Driver Electronics : | 0: Laser diode alone  
1: CCS-CW (open driver for CW only)  
2: CCS-std (Pulse and CW Driver)  
3: SHAPER (pulse only with user design pulse shape)  
4: CCM (High power version for multi-mode diodes) |
| Form Factor     | 0: Laser diode alone  
1: Open frame  
2: Integrated |
| SMF or PM       | 1: SM Fiber  
2: PM Fiber |

Ordering information :

Wavelength (any value between 1270 and 1650 nm - see the dedicated webpages)  
1 : SMF  
2 : PMF

Example : 1550LD-3-2-1-2 = 1550 nm 100 mW laser diode with a PM Panda fiber output, mounted on a «pulsed On/Off & CW» open frame driver

* : See the product webpage tables for exact laser diode model codification which is specific for each wavelength (scroll down the webpages to see all configurations and prices).