1064 nm Laser diode & Turn-key solutions

AerodioDE

www.aerodioDE.com
1064 nm laser diode

Choose your own Bragg, DFB or multimode laser diode + driver solution

Standard Bragg or DFB laser diodes are offered as Stock items or associated with a CW and/or Pulsed Turn-Key Laser Diode Driver.

**1st** Choose your laser diode:

- **Diode type**
  - 1: Standard with Bragg
  - 2: DFB
  - 3: Ultra Broad FBG
  - 4: Multimode
  - 5: Multimode

- **Technology**
  - PM single-mode
  - > 2 nm

- **Wavelength (nm)**
  - 1064 ±2 nm (chip regulated at >30°C)

- **Fiber**
  - PM single-mode

- **Emision Linewidth (typ)**
  - 1-3 nm

- **Power Kink free (CW)**
  - up to 700 mW

- **Power Kink free (Pulse)**
  - up to 1500 mW

- **Package**
  - 14 pin - type 1

**Output Power - CW regime (typ)**

<table>
<thead>
<tr>
<th>Laser Diode version</th>
<th>CW</th>
<th>Std (from 1ns to CW)</th>
<th>HP (High Power)</th>
<th>HPP (High Pulse Performance)</th>
<th>SHAPER (User Design Pulse Shape)</th>
<th>CCS/CCMI (High Power for 10 W model only)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 - Bragg</td>
<td>700 mW</td>
<td>400 mW</td>
<td>550 mW</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>2 - DFB</td>
<td>200 mW</td>
<td>200 mW</td>
<td>500 mW</td>
<td>No</td>
<td>No</td>
<td></td>
</tr>
<tr>
<td>3 - Broad FBG</td>
<td>650 mW</td>
<td>500 mW</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4 &amp; 5 Multimode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>No</td>
<td>9 W / 25 W</td>
</tr>
</tbody>
</table>

**2nd** Choose your Driver performance:

- **Laser Diode T° range**
  - 15 - 50 °C
  - 15 - 40 °C

- **Pulse duration (Ext pulse trigger)**
  - 0.5 ns - CW
  - 0.5 ns - 8 µs
  - 10 µs - CW

- **Typ rise/fall time ; Min Pulse duration**
  - 3 (ns/A) ; 1.5 ns
  - <1 (ns/A) ; 1.5 ns
  - < 1 (ns/A) ; few µsec

- **Internal rep rate adjustment**
  - 1Hz - 4MHz
  - 1Hz - 250MHz (optional)
  - 1Hz - 20MHz

- **Temporal Jitter**
  - < 25 ps
  - < 8 ps
  - < 2 ns

- **Adj. CW offset in pulse regime**
  - No
  - Yes
  - No

**Interface/GUI/libraries**

- USB - Windows 7/10
- DLLs
- Hexa/Linux
- Labview
- Python

**3rd** Choose your product form factor: OPEN or INTEGRATED

**OPEN FRAME VERSIONS**:

- CCS-CW
- CCS-std/HP
- CCS-HPP

- Open driver for CW, std and HP electronics Boards

- Open driver for HPP (High Pulse Performance) electronic Board

- Open driver for Shaper electronics Board

**INTEGRATED VERSIONS**:

- CCSI-CW/ std/HP/HPP
- SHAPER
- SHAPER-I

- Integrated version for CW, std and HP electronics board

- Integrated version for Shaper electronics board

www.aerodiode.com
Classification:

### Name: 1064nm LD:

- **Diode type**
  - 1: Standard Fabry-Perot (14 pin Butterfly)
  - 2: DFB (10 pin Butterfly)
  - 3: Ultra Broad FBG (10 pin Butterfly)
  - 4: Multimode 9 W - 105 µm core
  - 5: Multimode 25 W - 105 µm core

- **Driver electronics**
  - 0: No driver (laser diode only)
  - 1: CW driver (for CW laser diode emission only)
  - 2: Std - Pulse and CW Driver
  - 3: HP (High Power)
  - 4: HPP (High Pulse Performance)
  - 5: SHAPER
  - 6: CCM/CCMI High power (For multimode diode only)

- **Form Factor**
  - 0: No driver (laser diode only)
  - 1: Open
  - 2: Integrated

Ordering information:

- **1064LD**
  - 1064LD - [□] - [□] - [□]

- **Diode type**: 1, 2, 3, 4, 5
- **Driver type**: 0, 1, 2, 3, 4, 5, 6
- **Form Factor**: 0, 1, 2