## Technical Specifications

### Optical

<table>
<thead>
<tr>
<th></th>
<th>PDM</th>
<th>PDM₄</th>
<th>PDM₄ Multimode</th>
<th>PDM₄ Multimode HP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peak power</td>
<td>Up to 2W</td>
<td>Up to 6W</td>
<td>Up to 120W</td>
<td>Up to 200W</td>
</tr>
<tr>
<td>Pulse width</td>
<td>From 1ns to CW</td>
<td>From 1ns to CW</td>
<td>From 100ns to 1µs</td>
<td>From 100ns to 1µs</td>
</tr>
<tr>
<td>Repetition rate</td>
<td>From single shot to 250 MHz</td>
<td>From single shot to 250 MHz</td>
<td>From single shot to 100 kHz</td>
<td>From single shot to 100 kHz</td>
</tr>
<tr>
<td>Available wavelengths (nm)</td>
<td>808, 976, 1030, 1064, 1075&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>976,1064, 808&lt;sup&gt;(2)&lt;/sup&gt;</td>
<td>976</td>
<td>976</td>
</tr>
<tr>
<td>Operating mode</td>
<td>Pulsed and CW</td>
<td>Pulsed and CW</td>
<td>Pulsed</td>
<td>Pulsed</td>
</tr>
<tr>
<td>Beam quality</td>
<td>M²&lt;1.2</td>
<td>M²&lt;1.2</td>
<td>105 µm ; N.A.=0.12</td>
<td>150 µm ; N.A.=0.22</td>
</tr>
<tr>
<td>Command interface</td>
<td>TTL/LVTTL&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>TTL/LVTTL&lt;sup&gt;(3)&lt;/sup&gt;</td>
<td>TTL</td>
<td>TTL</td>
</tr>
<tr>
<td>Output fiber</td>
<td>SM/PM</td>
<td>SM/PM</td>
<td>MM 105 µm</td>
<td>MM 150 µm</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>N.A.=0.12</td>
<td>N.A.=0.22</td>
</tr>
</tbody>
</table>

<sup>(1)</sup> Other available wavelengths: 845, 1310, 1480, 1550 nm...

<sup>(2)</sup> Choose two wavelengths from 976, 1064, 808 nm...

<sup>(3)</sup> LVDS or other on demand (LVPECL, CML, LV5)

### Electrical

- Operating voltage: 12-15 Vdc (OEM) 110/220V ac/dc converter included
- Input impedance: 50 Ω

### Mechanical

- PDM and PDM₄ Multimode
- PDM₄ and PDM₄ Multimode HP

### Options

- Polarized fiber (single-mode only)
- Output isolator
- Narrow emission bandwidth
- Separated collimator
- Interlock
- Various fiber connectors (FC, SMA...)
- 150 picosecond pulses (PDM only)
**Pulse-on-Demand Modules**

For full temporal agility

Generate optical pulses on demand from your input TTL/LVTTL digital signal

**PDM**

- Versatile optical pulse generator
- Single-mode output fiber
- High power (up to 2W)
- <8 ps temporal jitter

**PDM 4**

- Dual Wavelengths (980 and 1064 nm)
- Single-mode output fiber
- High power (up to 6W)

**PDM Multimode**

- Low N.A. (0.12)
- Low fiber diameter (100 µm) for reduced spot size
- Very high power (up to 120W)

**PDM Multimode HP**

- Double diode for very high power (up to 200W)
- Red beam pointer

The PDM series consists of OEM laser modules which generate optical pulses from input TTL/LVTTL digital signal. From single-shot to CW, with pulse length from 1ns to any required pulse-burst configuration, the PDM series offers the best temporal flexibility on the laser market.

**Key features:**
- Single-shot, burst mode or CW operation
- Up to 200W peak power
- Min. pulse duration: 1 nsec (FWHM)
- Extremely low jitter (<8ps)
- Large range of wavelengths from UV to IR
- Up to 250 MHz repetition rate
- Excellent beam quality
- Low N.A.

**Key applications:**
- MOPA architecture
- Low power micromachining
- Laser development
- Non destructive control
- Telemetry
- Doppler measurements
- Metrology
- Semiconductor testing