JenLas® D2.mini 3/8 W FC

Compact & reliable medical and scientific applications with Jenoptik’s fiber-coupled solid-state laser modules.

Applications
- JenLas® D2.mini is a class 4 OEM laser source for
  - Ophthalmology
  - Dermatology
  - Life-science instrumentation

Features
- Small form factor - low weight
- High laser output power stability
- Redundant power monitoring
- Redundant fiber connection monitoring
- Amplitude modulation up to 50 kHz
- Pilot beam
- Low cooling requirements
- Replaceable exit window
Diode-pumped thin-disk laser, frequency-doubled

**JenLas® D2.mini 3/8 W | Specifications**

<table>
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<tr>
<th>General Properties</th>
<th>JenLas® D2.mini 3 W FC</th>
<th>JenLas® D2.mini 8 W FC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Laser parameters</td>
<td>see JenLas® D2 mini specification sheet</td>
<td></td>
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<tr>
<td>Wavelength</td>
<td>532 nm</td>
<td></td>
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<tr>
<td>Output power laser (cw)</td>
<td>3 W</td>
<td>8 W</td>
</tr>
<tr>
<td>Coupling efficiency</td>
<td>typ. ~ 90 % / guaranteed ≥ 85 % @ below stated fiber requirements</td>
<td></td>
</tr>
<tr>
<td>Power stability (rms)</td>
<td>≤ 3 %</td>
<td></td>
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<tr>
<td>Pulse duration, modulation via diode laser current</td>
<td>~ 1 ms to cw (amplitude modulation up to 50 kHz possible)</td>
<td></td>
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</tbody>
</table>

**Fiber Specifications**

- Fiber connector: SMA-905
- Fiber eccentricity: ≤ 10 µm
- Fiber requirements: suitable for ≥ 100 µm core diameter / NA ≥ 0.11
- Pilot laser: 638 nm / 0 - 3 mW
- Protection window: yes, exchangeable by user

**Electrical Specifications**

- Electrical input data: 2 V / typ. 20 A (at pump diode) $I_{\text{max}} = 24$ A
- Connector fiber coupling unit: 12 pin Fischer connector
- Connector laser cavity: 9 pin Fischer connector
- Power monitor: redundant, 2 photodiodes

**Mechanical Specifications**

- Dimensions (W x H x L): 153 mm x 80 mm x 24 mm
- Weight: 0.5 kg
- Dimensions (W x H x L): 153 mm x 84 mm x 34 mm
- Weight: 0.6 kg

Fiber coupling unit is not an accessory, has to be ordered with laser module. All specifications are measured with a standard fiber.

**JenLas® D2.mini 8 W FC**

- [Diagram of JenLas® D2.mini 8 W FC]

It is our policy to constantly improve the design and specifications. Accordingly, the details represented herein cannot be regarded as final and binding.