## Product Description

The LDP-V 50-100 is a small and inexpensive source for generating nanosecond pulses. The device is optimized for pulse repetition rates from single shot up to MHz repetition rate with duty cycles up to 59%**. Its typical application is driving pulsed laser diodes. Those can be mounted directly onto the LDP-V, eliminating the need for strip lines. The diode must be electrically isolated from earth (chassis) ground. Compatible laser diode packages: TO-18, TO-5, TO-52, 5.6 mm, 9 mm and similar. Despite its small size, the LDP-V is designed for ease of use. It eliminates the need for multiple peripheral supply units. A single 15 .. 24 V DC supply and a triggering signal are all which is required for operation. Additionally, you can upgrade the LDP-V with the PLCS-21 controller to enable USB 2.0 communication with a PC or the external operating unit PLB-21.

** Do not use PLCS-21 with higher supply voltage than 15 V. If you use the PLCS-21 with higher voltage than 15 V, the device will be damaged.

## Technical Data*

<table>
<thead>
<tr>
<th>Parameter</th>
<th>Specification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Output current</td>
<td>3 .. 50 A</td>
</tr>
<tr>
<td>Max. output voltage</td>
<td>100 V</td>
</tr>
<tr>
<td>- int. high voltage</td>
<td>0 .. 100 V, 1 A, 15 W</td>
</tr>
<tr>
<td>Rise time</td>
<td>Typ. 2.3 ns, max. 4 ns</td>
</tr>
<tr>
<td>Trigger delay</td>
<td>Typ. 36 ns, max. 40 ns</td>
</tr>
<tr>
<td>Min. pulse duration</td>
<td>8 ns</td>
</tr>
<tr>
<td>Max. pulse duration</td>
<td>&gt; 1 µs (@ 50 A)**</td>
</tr>
<tr>
<td></td>
<td>&gt; 10 µs (@ 5 A)**</td>
</tr>
<tr>
<td>Trigger range</td>
<td>Single shot to 2 MHz**</td>
</tr>
<tr>
<td></td>
<td>(refer to diagram with operating limits)</td>
</tr>
<tr>
<td>Trigger input</td>
<td>5 V into 50 Ω via SMC-jack</td>
</tr>
<tr>
<td>Trigger output</td>
<td>Galvanically isolated</td>
</tr>
<tr>
<td></td>
<td>Rogowski coil</td>
</tr>
<tr>
<td>Current monitor</td>
<td>20 A/V into 50 Ω</td>
</tr>
<tr>
<td>Supply voltage</td>
<td>15 ... 24 V, 2.2 A</td>
</tr>
<tr>
<td></td>
<td>Optional: 0 ... 100 V, 30 W (external high voltage)</td>
</tr>
<tr>
<td>Max. power dissipation</td>
<td>25 W</td>
</tr>
<tr>
<td>Dimensions in mm</td>
<td>75 x 44 x 20</td>
</tr>
<tr>
<td>Weight</td>
<td>76 g</td>
</tr>
<tr>
<td>Operating temperature</td>
<td>-20 to +55 °C</td>
</tr>
</tbody>
</table>

* Measured into a short instead of laser diode. Technical data is subject to change without further notice.

** See manual for detailed information.

### Optional Accessories:
- PLCS-21
- PLB-21
- LDP-V BOB
- LDP-V KIT