

DPSP 1000 1000 W Pulsed Laser Diode Drivers

Features

Drives high power laser diodes

Short rise and fall time

Excellent dynamic performance

No overshoot, no ringing

Available with integrated pulse unit or external pulse unit

Available with integrated pulse control generator

Fully programmable and configurable

Integrated measurement data acquisition system

Industrial Interface

RS 232-Interface

Single-phase AC wide input range with active power factor correction

Very low EMI, no external mains filter required



Diode current 0 ... 50 A Diode voltage 0 ... 20 V

DPSP 1000-070

Diode current 0 ... 70 A Diode voltage 0 ... 14 V

DPSP 1000-100

Diode current 0 ... 100 A Diode voltage 0 ... 10 V

General specifications

Pulse length 0 µs ... CW

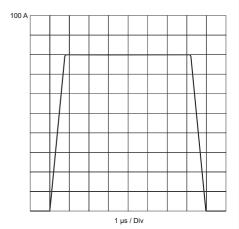
Pulse frequency 20 KHz / 50 KHz max

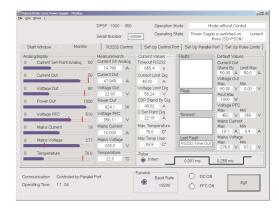
Rise time 1 μ s Fall time 1 μ s Ripple current 0.03 %pp Current accuracy \pm 0.1 % \pm 50 ppm / °C Supply voltage 87 ... 276 V AC Ambient temperature 0 ... +45 °C

Dimensions 312 x 247 x 126 mm

Weight 17 kg







Description

The DPSP 1000 drivers are fully programmable high power pulsed drivers for laser diodes and laser diode stacks.

12 different models are available, models with integrated pulse unit, models with external pulse unit and models with an integrated crystal accurate pulse control generator which is programmable in the range of 1 μ s ... 16.777 s in steps of 1 μ s.

All devices offer high accuracy, excellent pulse characteristics and stability, low drift and an ideal current source characteristic with high output impedance.

Two interfaces are integrated, a Control Port and a RS 232 Port.

A Parallel Port and a CAN Port are optionally available. Both are designed as a plug-in card and can be installed subsequently.

The DPSP 1000 drivers can be controlled and configured directly by means of the control- and configuration software included in delivery.

For detailed information see operating manual or visit our website.