

Data Sheet

Modular Pulsed High Power Driver (DPDP)

Features

Modular configuration
 Air- or water cooled
 High current stability, low ripple
 Exceptionally short rise and fall time
 No overshoot, no ringing
 High output impedance
 External trigger input, internal pulse generator
 Control via touch display or external PC
 Operation in CW, pulsing or burst mode
 Multifunctional interface



Specification Diode Unit

Diode current	0 ... 240 A / 0...320A
Diode voltage	0 ... 55V / 0...24V
Supply voltage	3 ψ 3-wire / Δ 196 ~ 305VAC or 3 ψ 4-wire / Y 340 ~ 530VAC
Supply current	15A/230VAC(3 ψ 3-wire / Δ) 9A/400VAC(3 ψ 4-wire / Y)
Output power	4800 W max
Pulse frequency	20kHz
Rise / Fall time	1 μ s
Accuracy	1 %
Temperature stability	50 ppm / °C Ripple current 1%
Diode current monitor	0...5 V \wedge 0...240 A / 320A
Diode voltage monitor	0...5 V \wedge 0...55 V / 24V



Specification TEC Controller (option)

TEC voltage	0 ... 24 V max
TEC current	0 ... 15 A max
TEC power	360 W max
Temperature range	0 ... +50 °C
Accuracy	0.1 K
Temperature monitor	100 mV / °C Temperature sensors PT 1000 or KTY 11-5

General Specifications

Ambient temperature	0 ... +45°C
Cooling	Water (20°C/ max. 6 bar) / air
Dimensions	777 x 440 x 132 mm / 777 x 440 x 176mm
Weight	31 kg

Description

The DPDP is a modular pulsed high power laser diode driver. Single module is D3300-60 / max 55V diode voltage (possible expansion stages: 60A / 120A / 180A / 240A) or D1900-80 / max. 24V diode voltage (80A / 160A / 2400A / 320A). Option with TEC: 60A/120A/180A, max. 24V diode voltage.

This technology has a lot of advantages and is particularly suited for driving laser diodes. It offers high accuracy and current stability, excellent dynamic performance, high output impedance and low electromagnetic interference. No current overshoot or ringing arise when altering output current or load impedance abruptly. It can be air-cooled or water-cooled.

The DPDP has a multifunctional interface (USB, RS232, RS485, TCI / IP) and can be operated via an external PC, via integrated touch display (optional) or via buttons / LEDs. CW, pulsing and burst modes can be configured with an internal pulse generator. DPDP can also be operated with an external pulse generator. Device has LED status indicators, ON / OFF buttons and Emergency Stop button. The device also includes an external pulse unit for close assembly to the diode.



Warning!

**Risk of exposure of hazardous laser radiation
 in combination with laser light emitting devices!**

Technical subjects to change without notice.

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