

FEDAL

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Laser Diode Drivers and diode drivers for Butterfly Packages: product line and opportunities on Chinese market

SPEAKER:

Zoia Pavlova

Chief Operating Officer

成立日期 (Date of foundation): 2003

產品系列 (Product line):

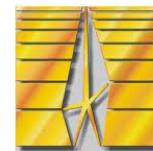
公司以 专业化是激光电子产品的设计和制造

development and production of laser electronics and electronics for optical devices

我們的客戶 (Our customers):



Montfort Laser™
GmbH



Ioffe
Physical-
Technical
Institute



關於我們

About us

公司 / **Factory**

活動和貿易展 / **Events & Trade Shows**

文憑 / **Diplomas**

聯繫方式 / **Contacts**



We participate in the world's largest exhibitions:

- SPIE Photonics West (San Francisco, USA);
- Laser world of Photonics (Munich, Germany);
- Photonics Russia (Moscow);
- Optic Expo (Moscow);
- Laser Optic (Saint-Petersburg);
- OVC EXPO (Wuhan, China)

and other scientific and trade events





**Our distributor
in China, Singapore, India**



Sintec Optronics

Lasers, Optics, Laser Components & Machines

Sintec Optronics Co., Ltd

website: <http://www.sintecoptronics.cn>

<http://www.518168.cn>

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Wuhan Hubei, 430205 PR China

Tel: +86 27 51858932

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E-mail: sales@sintecoptronics.cn or grace@SintecOptronics.cn

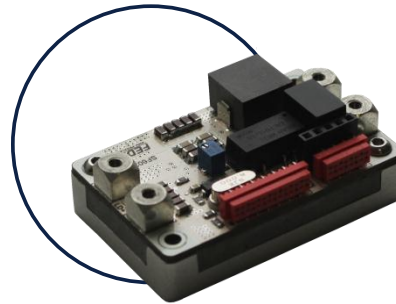
激光电源

Laser power supplies



二极管驱动器

Diode drivers



多通道的激光电源 (MEPSS)

Multichannel electric
power supplied system for
diode-pumped lasers
MEPSS

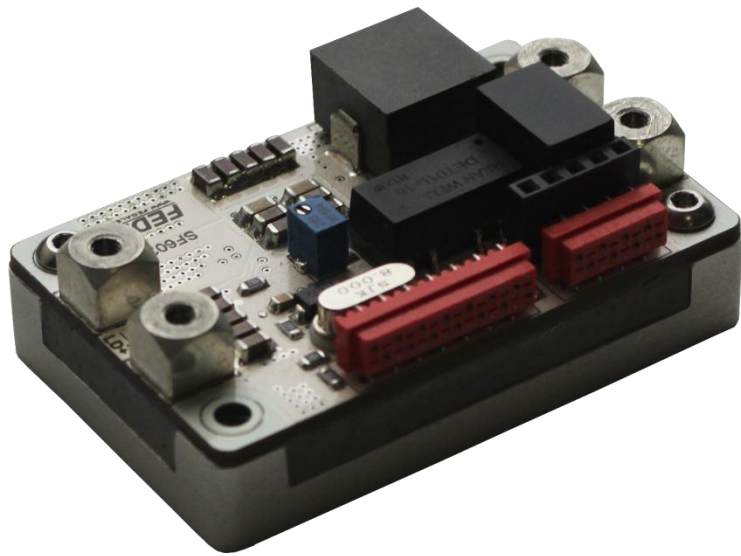


充电模块

Charging modules



針對中國市場的新的解決方案： Solution for the Chinese market



二极管驱动器 Diode drivers

OEM

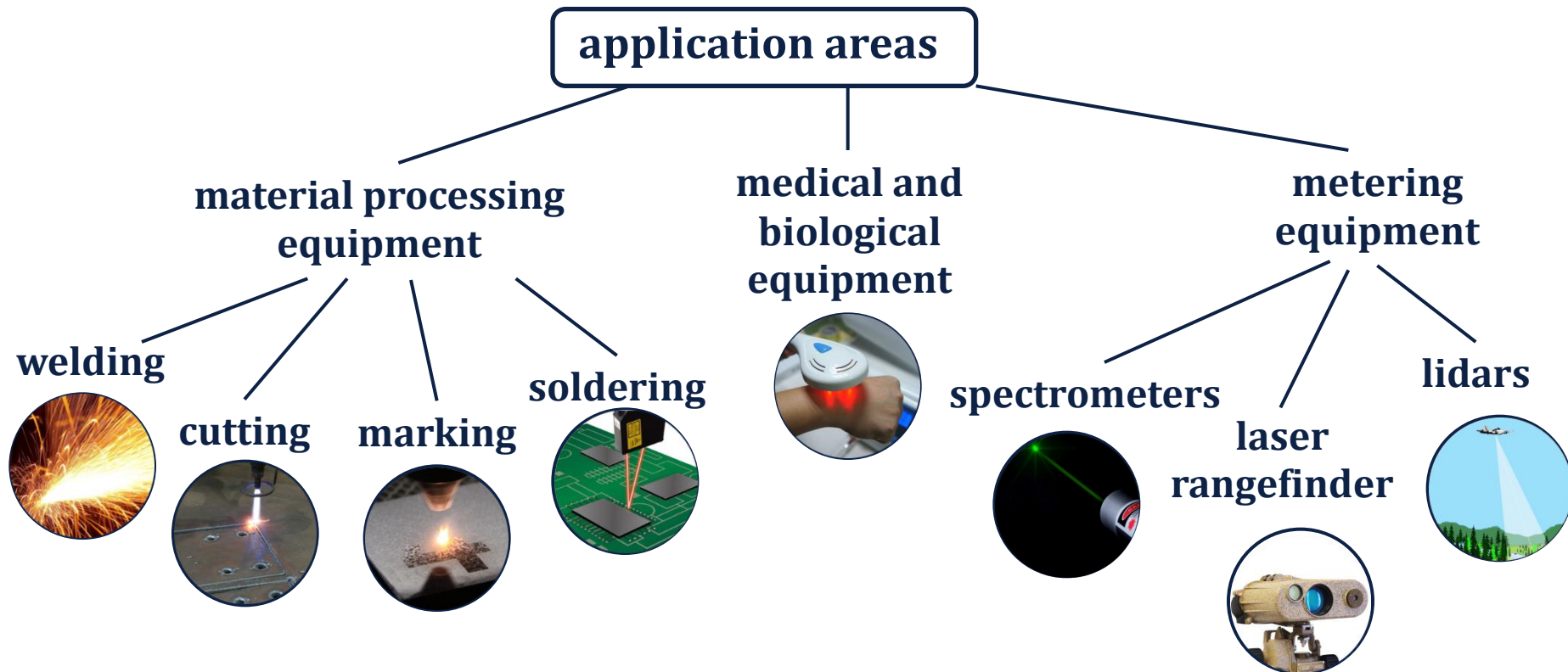
廉價 / low-cost

緊湊 / compact

高效率和高可靠性的技術解決方案
/ high efficient and highly
reliable technical solutions

OEM

The high level of integration for your application



OEM

Simple integration

easy control

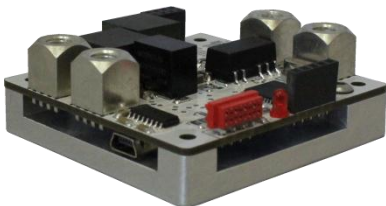
digital control

analog control



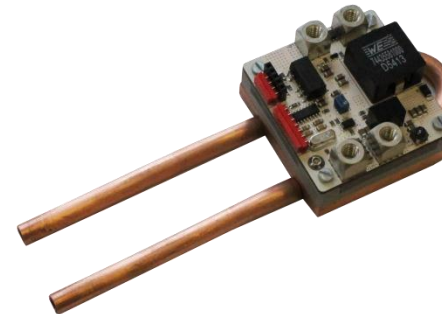
software and drivers
for Labview included

communication protocol

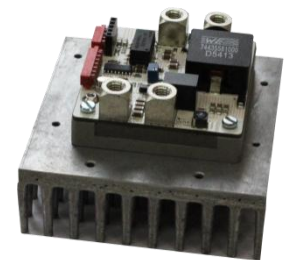


accessible mechanic

You can install our driver
where you want



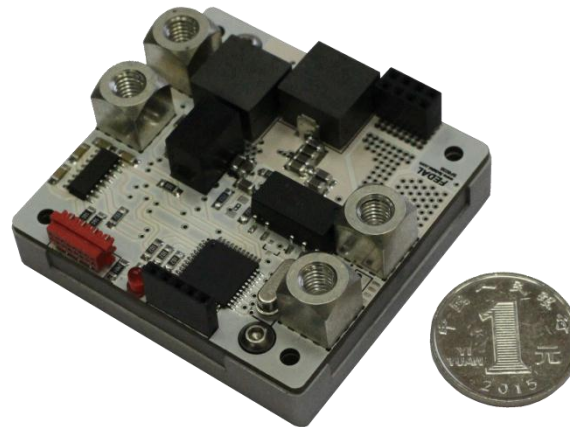
water cooling



air cooling

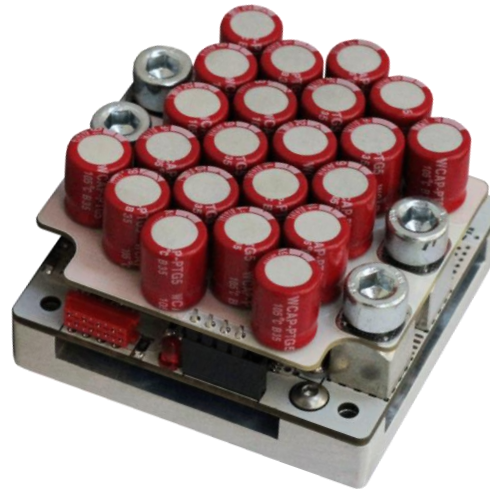
Low-cost

- **Low cost and high quality solution in best for your appliances**
- **We makes special offer for the Chinese market**
- **Total price:**
 - \$ 450 per 1 kW of output electric power for 1 piece**
 - \$ 370 for 50 or more pieces**



Compact

Highest Power Density available 1kW in half-brick size (60x60mm)



You can integrate it into your laser system

High efficient and highly reliable technical solutions

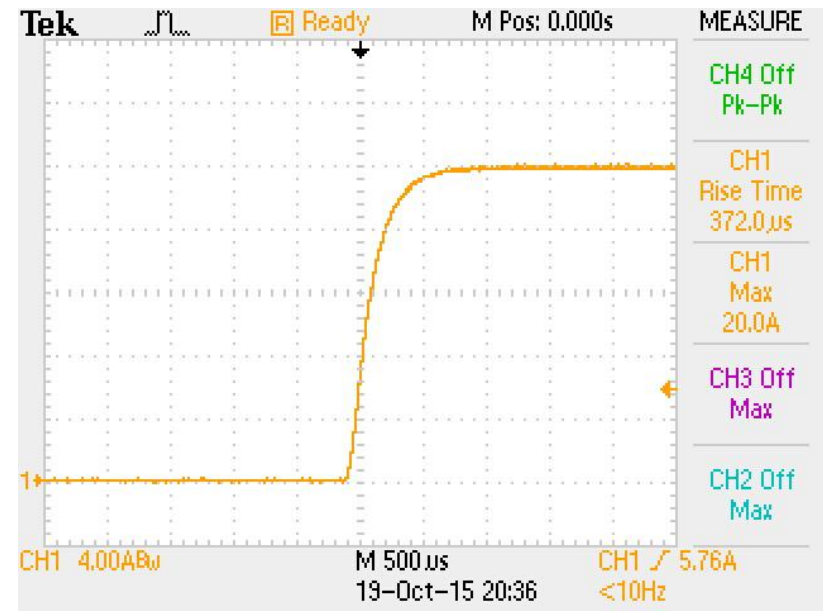
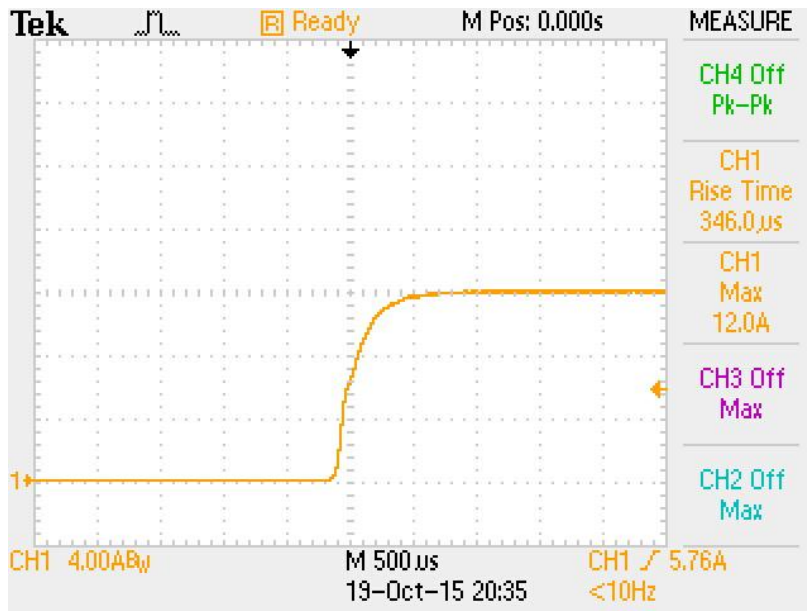
Current **up to 20A at 40V**
up to 15A at 10V
up to 30A at 10V



Do you know that $4.375 * 10^{20}$ electrons passes per second at current 70A through the laser diode

High efficient and highly reliable technical solutions

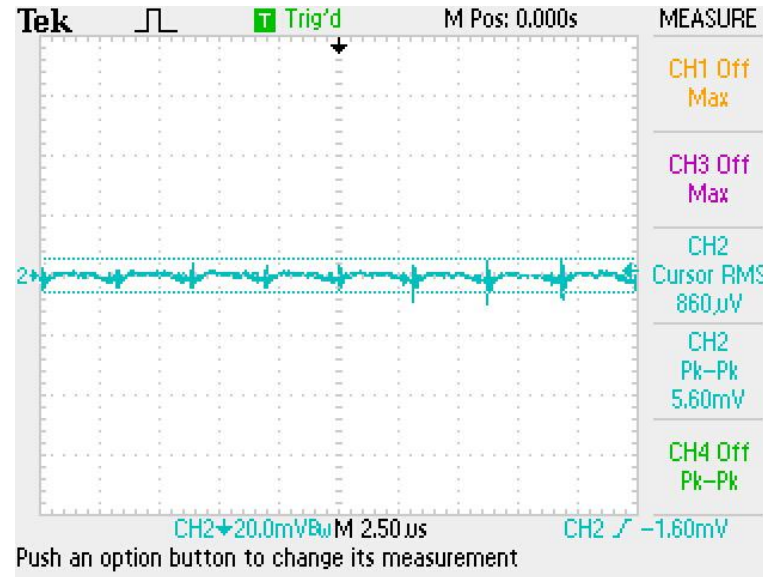
Soft Start: $<500 \mu\text{s}$ without overshooting



Your laser diode is safe at start up!

High efficient and highly reliable technical solutions

The ripple amplitude <math>< 15\text{ mA}</math>



The ripple amplitude (2 mA / mV) @ 12A, 35V



Your laser diode is safe when operates.
Your laser radiation has high stability.

High efficient and highly reliable technical solutions

Current protection with crowbar clamp across the output and adjustable current limit



Over temperature protection with over temperature warning



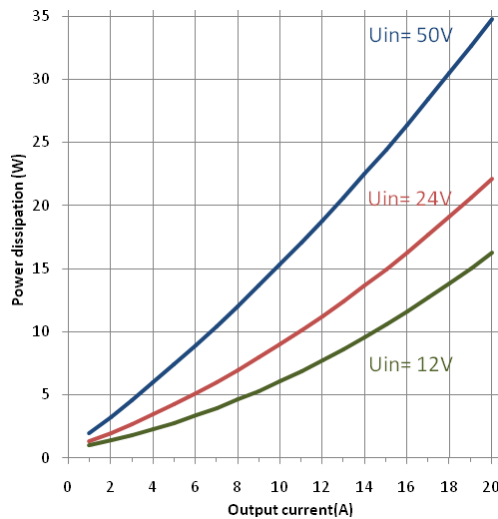
Reverse current protection diode



Your laser diode is safe under all conditions

SF6100

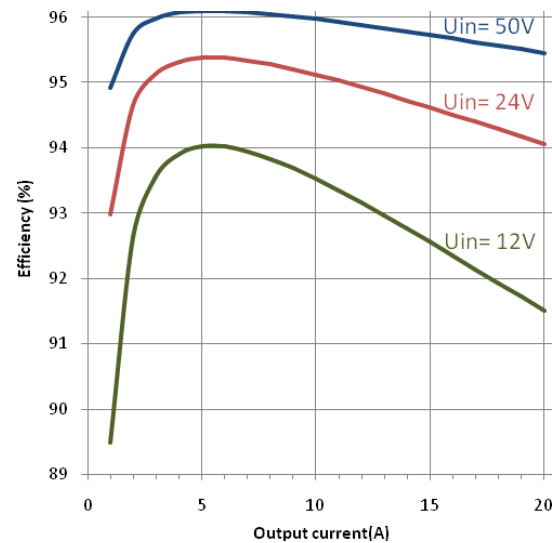
20A, 40V



Power dissipation vs output current.

SF6100

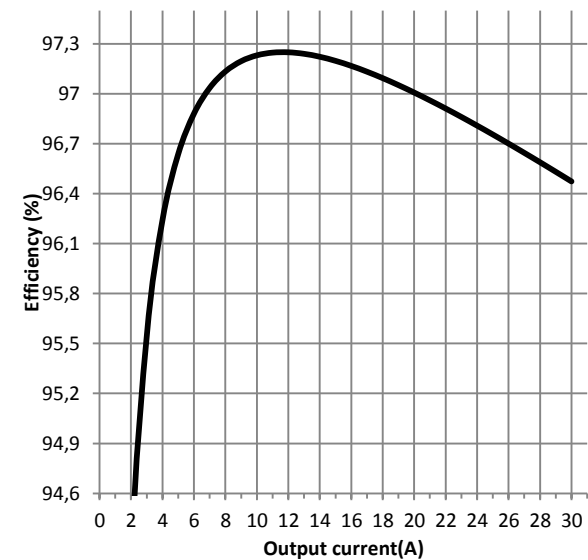
20A, 40V



Efficiency vs output current.

SF6015 & SF6030

15A & 30A, 10V



Efficiency vs output current.



Efficiency up to 97%

激光电源

Laser power supplies

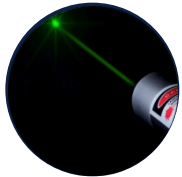


- 脉冲/连续方式 / **pulse/CW**
- 灯泵浦、二极管泵浦以及光纤激光器的电源 / **for lamp-, diode-pumped laser and fiber lasers**
- 多通道 / **multichannel systems**

应用 (Applications)



医学领域（光学相干透视、光动力疗法、激光外科、治疗皮肤病的激光设备）
Medicine (optical coherence tomography, photodynamic therapy, laser surgery, laser device for hyperthermia skin tumors)



仪器设备制造（激光测距仪、远程发现爆炸物的激光系统、远程探测）
Instrumentation (laser rangefinders, laser system for remote detection of explosives, reed speed, remote sensing)



专业化的激光设备的生产
Companies specializing in the production of laser equipment.

应用 (Applications)



科研（如：加快等离子波的电子达到很高的能量）

Scientific researches (ex, electrons acceleration nonlinear plasma waves to high energies)



军工领域（激光制导、激光反导系统、测距）

Military industrial sector (laser guidance, beam path conditioning for high-power laser Systems, laser anti-missile systems, space lemetry)



激光热核合成

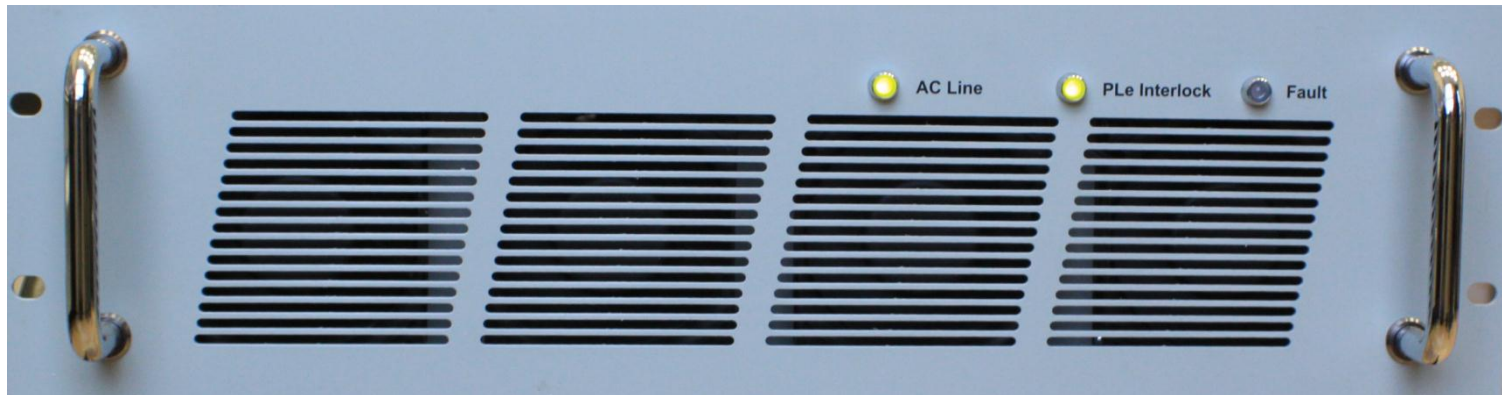
Laser fusion

Can be integrated into a large system

Easy connectors for quick replacement



Modification of the front panel for OEM solutions

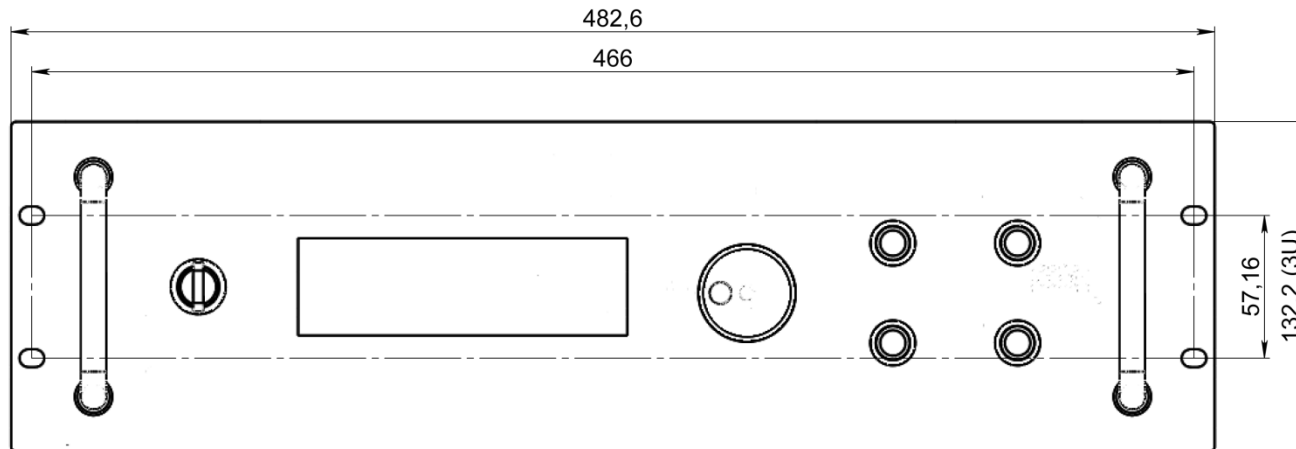


Can be integrated into a large system

Rack mounting (2U;3U; 4U)



The ability of Remote Control



Perfect solution for laboratory application

The wide range of output control



Combined pulse and QCW mode in one unit with a pulse rise time up to 50 μ s



Soft change of frequency, duration, voltage, current



Optimization for customer's load



Easy control from the front panel or PC

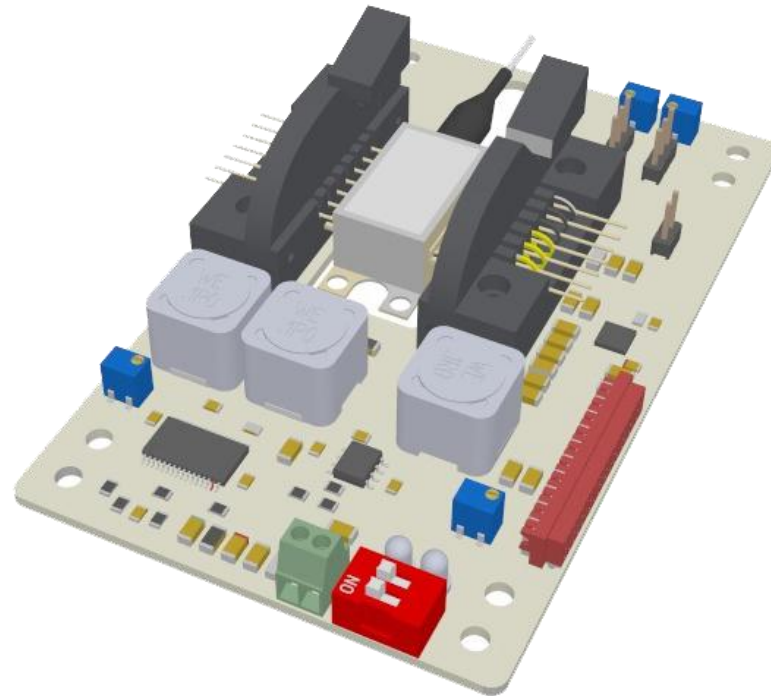


Custom power supply systems



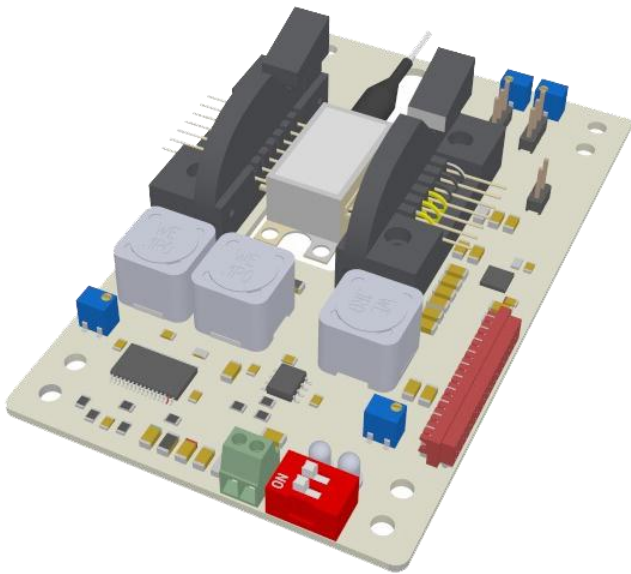
- **Multi-channel system based on typical power supplies models**
- **High output power (up to 240 kW average output power)**
- **Integrated trigger controllers and control units**
- **Engineering and cabling the electric power supplied systems**

Diode Driver for Butterfly Packages



New Product

New product: Diode Driver with Mount for Butterfly Packages



Two models



High stability (500 mA)



High power (up to 5A)



Features

Features



- **Integrated TEC controller (4A);**
- **Compact design;**
- **Various mounting LD options (connector on the board, soldering on the board; a connector for external connection);**
- **Large heatsink for stable heat dissipation.**



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