

# ***FEDAL***

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**WWW.FEDALEL.COM**

成立日期 (Date of foundation ): 2003

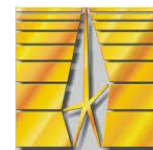
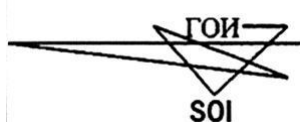
產品系列 (Product line ):

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



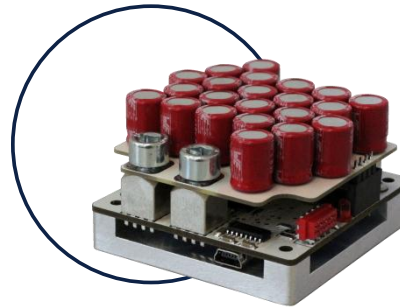
### 激光电源

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

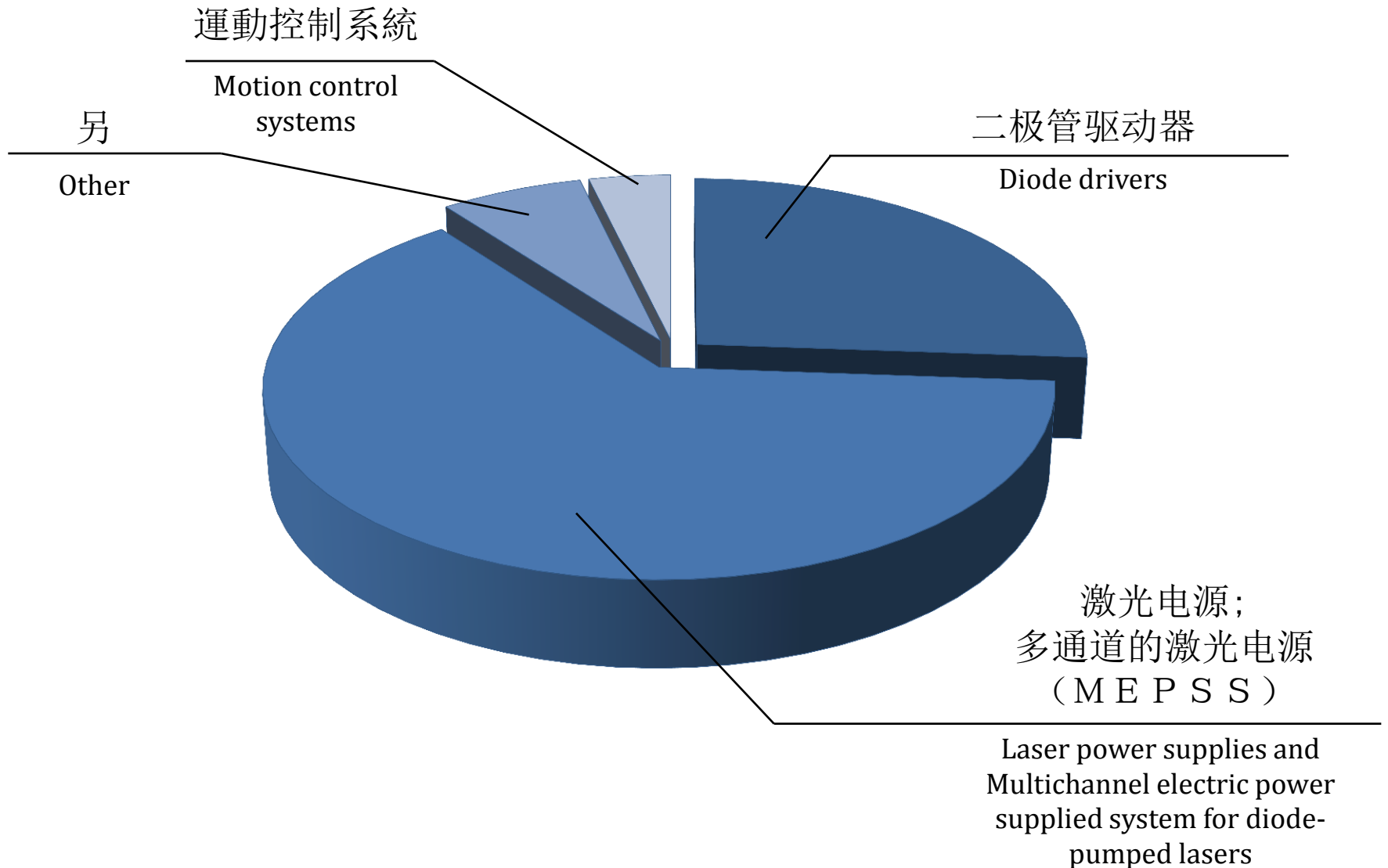


### 充電模塊 Charging modules



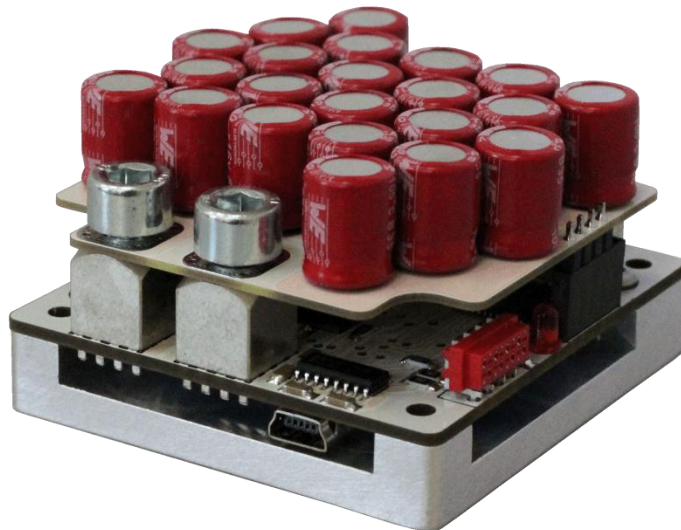
### 应用 (Applications):

- 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.
- 科研（如：加快等离子波的电子达到很高的能量）  
Scientific researches (eg, 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 lemety)
- 激光热核合成  
Laser fusion



## 針對中國市場的新的解決方案:

New solution for the Chinese market



## 二极管驱动器 Diode drivers

OEM

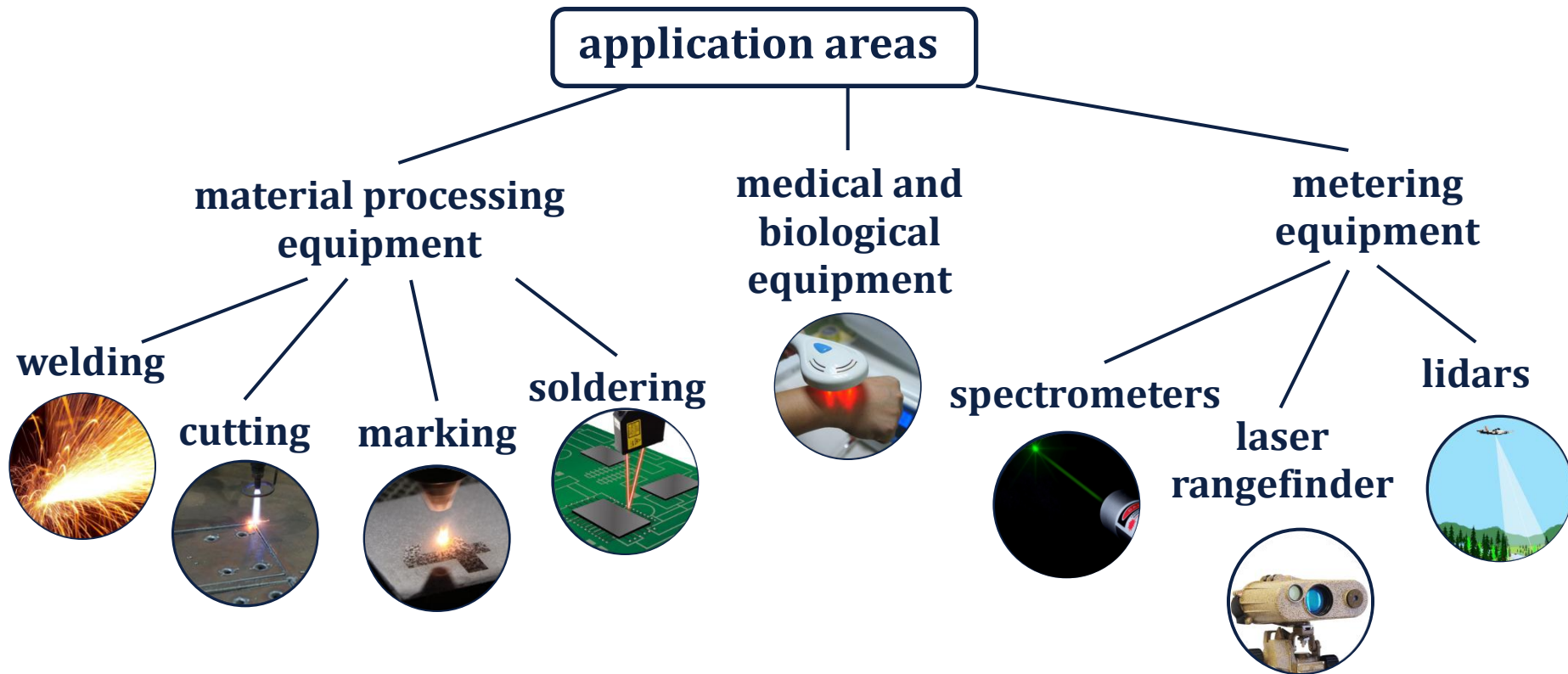
廉價 / low-cost

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

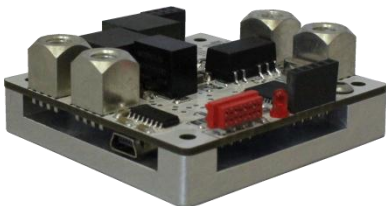
digital control

analog control



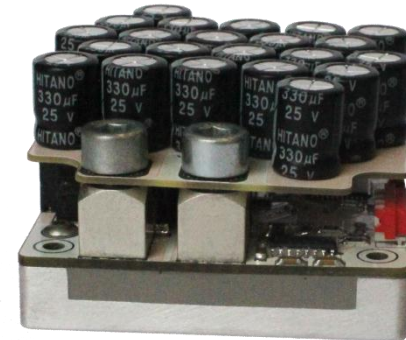
software and drivers  
for Labview included

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

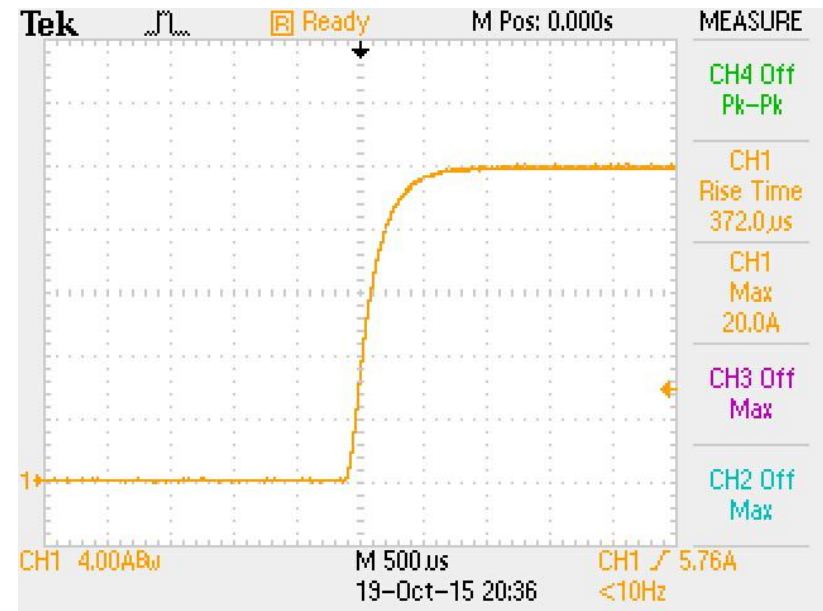
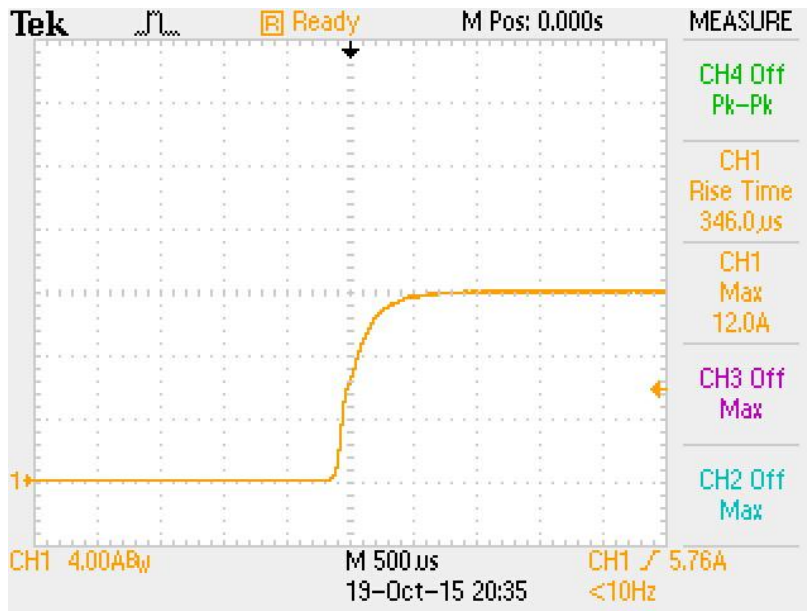
**Current**      **up to 20A at 50V**  
**up to 70A at 10V**



**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

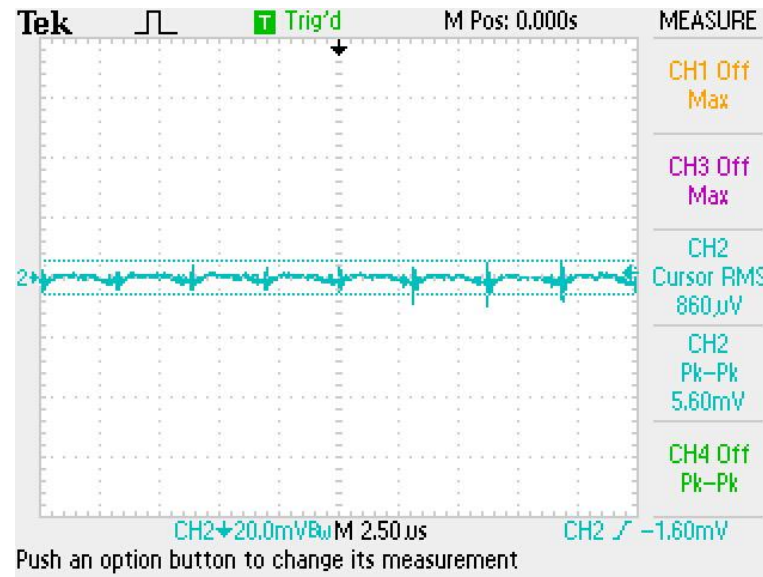
**Soft Start:  $<500 \mu\text{s}$  without overshooting**



**Your laser diode is safe at start up!**

## High efficient and highly reliable technical solutions

## The ripple amplitude <15 mA



**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 circumstances**

## 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**

# FEDAL

## Factory



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







# **FEDAL**

**It works!**

**[www.fedalel.com](http://www.fedalel.com)**