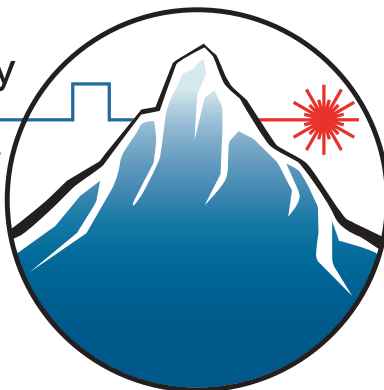


Directed Energy

DEI



Laser Diode

Instruments and Modules

*"Directed Energy is your Pulsed
Power Partner from Lab to Launch"*

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BENCHTOP

PCX-7420



The PCX-7420 provides both QCW (pulsed), and CW (DC) outputs. It can drive a bias current from 0.050 A to 5.8 A, and pulsed/QCW currents from 3 A to 21.5 A. A new feature allows the bias current to be pulsed and triggered independent of the main current trigger.

- Output Current up to 21.5 A
- Output Voltage up to 24 V
- Output Power up to 375 W
- Touch Screen Operation
- RS-232, USB and Ethernet Computer Interfaces

PCX-7420-B



The PCX-7420 B is an air-cooled, high-powered CW/QCW current source designed to drive diode lasers, bars, and arrays. It can drive a bias current from 0.050 A to 5.8 A (can be triggered independently of the primary current pulse). The pulsed output current is adjustable from 3.0 A to 21.5 A.

- Output Current up to 21.5 A
- Output Voltage up to 24 V
- Output Power up to 375 W
- RS-232 and USB Computer Interfaces

PCX-7500



The PCX-7500 is a series of air-cooled, high power current sources designed to drive laser diodes, bars, and arrays. The output current can be set from 10 A to 450 A. Compliance voltages range between 5 V and 110 V (see our website for configuration information).

- Output current from 10 A to 450 A
- Output voltage optimized ranges from 5 V - 110 V
- Rise and Fall times less than 15 μ s
- Shipped with RS-232, USB and Ethernet computer interfaces

PCX-6425



The PCX-6425 is an air cooled, high power pulsed current source designed to drive laser diodes, bars, and arrays. The output current can be set from 1 A to 150 A. The load voltage can be set from 0 V to 120 V. The pulse width is adjustable from 100 μ s to 5,000 μ s with a frequency range from single shot to 100 Hz.

- Variable Output Current from 0 A to 150 A
- Variable Output Voltage from 0 V to 120 V
- Rise and Fall Times Less Than 25 μ s
- Complete Computer Control via RS-232 or USB interfaces

NOTES

Directed Energy also offers a **lab to launch** program. The program provides custom manufactured in an ISO registered facility, tested and ready for installation. Our within early development brings our expertise right to your lab. Contact us today

MODULES

The PCO-7114 Series provides a compact and economical pulsed-current OEM laser diode driver module that provides a fixed, narrow pulse width allowing you to choose your optimum current and frequency.

- Range Finding & LiDAR
- Applications requiring high-current nanosecond pulses
- High Speed
- Narrow Pulse
- Designed for OEM

PCO-7114 Series



The PIM-Mini is a compact and lightweight series of pulsed current sources designed to drive laser diodes, bars, arrays, or any low-impedance load.

- Range Finding & LiDAR
- Other applications requiring high-current microsecond pulses
- Compact & Lightweight
- Designed for OEM

PIM-Mini Series



The PCM-7140 Series provides a compact pulsed, quasi-CW (QCW) and continuous wave (CW) current source designed to drive laser diodes, bars, arrays, or any low impedance load.

- Range Finding & LiDAR
- Other applications requiring high-current microsecond pulses
- Duty Cycles to DC
- High Peak Power
- Water Cooled for Clean Environments
- Designed for OEM

PCM-7140 Series



The PCO-6131 is a compact, OEM-style high power pulsed/CW current source designed to drive diode lasers, bars and arrays in pulsed, QCW or CW modes. It delivers up to 125 A of output current with pulse widths from 100 ns to DC and pulse repetition frequencies from single-shot to 500 kHz at duty cycles up to 100%.

- 1 A To 125 A Output Current
- Less than 100 ns to DC Variable Pulse Width
- 20 V Maximum Output Voltage
- User-Adjustable Variable Rise Time
- Repetition Frequency Single-Shot to 500 kHz

PCO-6131



The PCO-6141 is a compact, OEM-style high power pulsed/CW current source designed to drive diode lasers, bars and arrays in pulsed, QCW or CW modes. It delivers up to 60 A of output current with pulse widths from 100 ns to DC and pulse repetition frequencies from single-shot to 500 kHz at duty cycles up to 100%.

- 0 A To 60 A Output
- Less than 100 ns to DC Variable Pulse Width
- 20 V Maximum Output Voltage
- User-Adjustable Variable Rise Time
- Repetition Frequency Single-Shot to 500 kHz

PCO-6141



The PCO-7115-5-1 is a compact and economical pulsed-current OEM laser diode driver module that provides up to 5 Ampere (A) current at a fixed pulse width of one (1) nanoseconds (ns) at up to 1 mega-Hertz (MHz) pulse repetition frequency.

- 5 A To 5 A Output
- Pulse Repetition Frequency To 1 MHz
- Pulsed Current Monitor Output
- Ask us about custom configurations!
- Range Finding & LiDAR
- Other applications requiring high-current nanosecond pulses

PCO-7115 Series



The PCO-6511 is a compact and economical OEM-style CW laser diode driver designed to drive diode lasers, bars and arrays with output current variable from 0.5A to 10A, and a compliance voltage up to 10V.

- 0.5 A To 10 A Output
- 10 V Maximum Output Voltage
- +12 V to +16 V input DC operating voltage
- 100 W Maximum Output Power
- Real-time current monitor output

PCO-6511



The PCM-7700 is an air-cooled, high-power pulsed current source designed to drive laser diodes, bars, and arrays. The output current can be set from 5 A to 200 A.

- Output Current up to 200 A
- Output Voltage up to 25 V
- Output Power up to 1250 W
- Digital and analog control modes
- DB-15 Remote Interface for automated operation

PCM-7700 Series



The PCM-7510 pulsed laser diode driver delivers current pulses variable from 10 A to 250 A with up to 1250 W of total output power. Pulse widths can vary from 5 μ s to 5 ms with rise times and fall times of 2 μ s to 8 μ s.

- Output Current up to 250 A
- Output Voltage up to 120 V
- 5 μ s to 5 ms Variable Pulse Width
- Touch Screen Operation
- RS-232 Computer Interface

PCM-7510



From OEM pulsed and high voltage/high power solutions. Designed by experts, DEI Modules save you and your company time, effort and cost. Working together for more information.



ABOUT US

Directed Energy (DEI) was founded in 1987 as Directed Energy, Incorporated by George Krausse, Dave Adamson, and Ron Sherwood. The goal was simple; bring RF Power MOSFETs to the industry and provide uncompromising performance through our patented DE-Series low inductance, high speed, high power density package. As we worked with customers we realized that there was also a need for system and module products that provided high power and/or high voltage pulses at high speed. We developed the instrument product line to fill satisfy this need and help customers fulfill their end requirements without the need to develop, manufacture or maintain this niche technology.

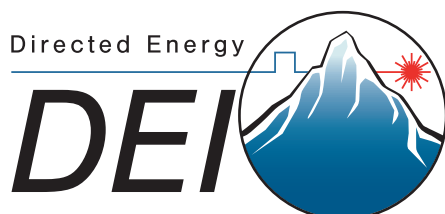
Designing the original DE-Series package to achieve the extreme performance improvements meant using our patented low inductance design along with BeO, Aluminum Nitride ceramic components along with other specialized materials. As the technology became more widely accepted, we realized that many markets that were not currently using our device would benefit from the high performance of our package design but we would have to find a way to reduce the cost (and later remove BeO).

During this time, one of our best suppliers of silicon die was IXYS Corporation, whose die we used in many of the original DE-Series devices. We approached IXYS with a proposed partnership to reduce cost by taking our packaging concept to a more traditional semiconductor manufacturing process. After discussing the idea the IXYS management team responded with an offer to purchase Directed Energy and on May 16th, 2000 Directed Energy, became a wholly owned subsidiary of IXYS.

The DEI brand continues to serve customers around the world with pulsed laser diode drivers and high voltage pulsers in benchtop, rackmount and module configurations to address a broad spectrum of customer needs. We feature a Lab to Launch program that allows us to work closely with customer development teams to reduce overall development cost by leveraging our expertise in pulsed power. The end result is an OEM module or instrument that is tailored to the needs of the customer's application or product.

In 2018 Littelfuse purchased IXYS and the merger of the two companies allowed Stephen Krausse the opportunity to acquire Directed Energy and return the pulsed laser diode drivers, current sources and high voltage pulser instruments and modules to private ownership. Our Colorado facility is focused on customer service, research and development and logistics.

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