

# Multi Channel Controllers

## 7000 SERIES MULTISOURCE

### LASER DIODE DRIVERS & TEMPERATURE CONTROLLERS

The **7000 Series Multi-Source** is a rack-mountable multi-channel controller available with either laser diode drivers or temperature controllers, and output powers of over 200W per channel. Designed to be used wherever high channel density is required, the MultiSource enables high channel counts in a small footprint.



#### Stable Temperature Control

The temperature control models of the **MultiSource** feature excellent temperature stability, easy setup, full PID control, and a variety of other features you have come to expect from Arroyo Instruments' products. The **MultiSource** is available in several different power levels, allowing you to match the requirements of your application without over-buying.

#### Fully Adjustable PID Control

All **TECSources** offer factory defined gain settings for temperature control. Need more control? Switch to PID gain and you have individual adjustment of each value in the PID circuit, providing fine adjustment of the control loop.

#### Universal AC Input

All **MultiSources** are designed with universal AC inputs,

eliminating the requirement to adjust voltage settings as the system moves from one country to the next.

### Temperature Controller Quick Specifications

| Model      | Amps | Volts | Max Watts | # Chan | Size | Output Connector | Therm | RTD & LM335 |
|------------|------|-------|-----------|--------|------|------------------|-------|-------------|
| 7154-04-08 | 4    | 8     | 32        | 4      | 1U   | DB15             | ●     |             |
| 7154-05-12 | 5    | 12    | 60        | 4      | 1U   | DB15             | ●     |             |
| 7254-06-56 | 6    | 56    | 282       | 4      | 2U   | DB15             | ●     | ●           |
| 7254-10-28 | 10   | 28    | 230       | 4      | 2U   | DB15             | ●     | ●           |

#### Built-In Fan Controller

All controllers include a DC power supply which can be used to power external fans often found in test fixtures.

#### General Specifications

|                        |   |
|------------------------|---|
| Remote Interfaces      | USB, Ethernet, and Digital I/O  |
| Size (HxWxD) [in (mm)] | 7100: 1.75 (45) x 19 (483) x 14.76 (375)<br>7200: 3.5 (90) x 19 (483) x 14.76 (375) |

## At a Glance

1U or 2U Rack-mountable  
Ethernet and USB  
Up to 220W per channel  
4 channels

### Benchtop or Rackmount

While the **MultiSource** includes integrated ears for rack-mounting, it can just as easily fit on your bench. At only 15" deep, it won't get in your way.

### Safe and Precise Laser Control

The **MultiSource** laser diode driver models feature the same precision and protection found in our benchtop products, giving you a seamless transition from benchtop to high density.

### Front Panel Status and Control

While the **MultiSource** is intended to be remotely operated via a computer, a VFD display allows for local status monitoring and on/off control of each channel. Select the overall view to see the state of every channel at once, or scroll through to view status and measurements of each individual channel.

## Laser Diode Driver Quick Specifications

| Model       | Amps | Volts | # Chan | Size | Output Connector |
|-------------|------|-------|--------|------|------------------|
| 7144-0.5-08 | 0.5  | 8     | 4      | 1U   | DB9              |
| 7144-01-08  | 1    | 8     | 4      | 1U   | DB9              |
| 7144-02-04  | 2    | 4     | 4      | 1U   | DB9              |
| 7144-04-04  | 4    | 4     | 4      | 1U   | DB9              |
| 7244-05-56  | 5    | 56    | 4      | 2U   | 13W3             |
| 7244-08-28  | 8    | 28    | 4      | 2U   | 13W3             |
| 7244-15-14  | 15   | 14    | 4      | 2U   | 13W3             |
| 7244-30-05  | 30   | 5     | 4      | 2U   | 13W3             |

### General Specifications

|                        |   |
|------------------------|---|
| Remote Interfaces      | USB, Ethernet, and Digital I/O  |
| Size (HxWxD) [in (mm)] | 7100: 1.75 (45) x 19 (483) x 14.76 (375)<br>7200: 3.5 (90) x 19 (483) x 14.76 (375) |

### Ethernet & USB Connectivity

With an integrated Ethernet port, multiple **MultiSources** can be quickly and easily connected together to create large multi-channel systems. Mix different **MultiSources** together to meet the various requirements of your system. USB is also included.



Temperature Controller models shown

# Laser Diode Controllers

## 6300 SERIES COMBOSOURCE LASER DIODE CONTROLLERS

The **6300 Series ComboSource** Laser Diode Controller offers the best of both worlds: a high accuracy, low noise laser driver and a powerful 60W temperature controller, all in one compact instrument.



The **6300 ComboSource** was born from the proven technology of our LaserSource and TECSource products, and includes several improvements making it our flagship product, providing outstanding performance at a price that does not kill your budget.

### 6300 Quick Specifications

| Model    | Milli-Amps  | Volts | Laser Connector | QCL |
|----------|-------------|-------|-----------------|-----|
| 6301     | 50 / 100    | 10    | DB9             |     |
| 6305     | 250 / 500   | 10    | DB9             |     |
| 6310     | 500 / 1000  | 10    | DB9             |     |
| 6340     | 2000 / 4000 | 4     | DB9             |     |
| 6310-QCL | 500 / 1000  | 18    | DB9             | ●   |
| 6340-QCL | 2000 / 4000 | 15    | DB9             | ●   |

#### General Specifications

|                        |                                 |
|------------------------|---------------------------------|
| TEC Power, Connector   | 5A / 12V / 60W, DB15            |
| Sensors Supported      | Thermistor, RTD, LM335, AD590   |
| Remote Interfaces      | USB and RS-232                  |
| Size (HxWxD) [in (mm)] | 3.5 (90) x 8.5 (215) x 12 (305) |

### Easy to Use, Easy to Configure

Like all our products, you'll find the user interface is easy to setup and use. A dot-pixel character display allows for human-readable status, readings, and errors. No longer do you need to get out the manual to figure out how to set the current limit, or to understand what error 114 is; you can read it directly on the display in plain English. Want to see big numbers from across the room? No problem. Want to see actual versus set point, voltage, and current...all at once? You can do that, too. With a configurable display you can make the instrument work the way you want it to. Its compact form factor means the **ComboSource** takes up less room on your test bench, and the USB and RS-232 computer interfaces make it easy to integrate into your existing test systems.

## At a Glance

100mA to 4 Amps  
60 Watt TEC  
Low noise, dual range  
Advanced laser protection  
Computer Interface



### User Function Keys

The user function keys can be used to quickly select different configuration states or execute a predefined set of commands. Switch between two different experiments or script repetitive actions...anything you can do manually with the instrument can be programmed to the function key.

### High Performance Temperature Control

In addition to being an excellent laser driver, the **ComboSource** also functions as a high performance temperature controller. Sixty watts of output power and fully adjustable PID control make it suitable for a wide range of applications.

### Dual Range Operation & 4-Wire Sense

The **ComboSource** features dual current operating ranges for improved noise and accuracy for lower current applications without sacrificing headroom for your more power powerful devices. The **ComboSource** also has 4-wire sense for accurate device voltage measurements. This eliminates voltage errors caused by cable and connector resistances.

### Full Isolation Means No Ground Loops

Beyond the expected laser protection features, the **ComboSource** adds something unique to the Arroyo family of products: optical isolation of the modulation and photo diode inputs (the computer interfaces are also isolated). This protects against unwanted ground loops and other electrical disturbances that can plague traditional instruments and damage lasers. No other driver on the market has this capability.

### Enhanced QCL Capabilities

The **6310-QCL** and **6340-QCL** Controllers are designed to operate at the higher compliance voltages required by QCL lasers.

### Independent, Isolated Outputs

With multiple, independent power supplies, the **ComboSource** operates the laser and temperature controller outputs fully independent of each other, with full electrical isolation.

# Laser Diode Drivers

## 4200-DR, 4300, AND 4400 SERIES LASERSOURCE

### LASER DIODE DRIVERS

The Arroyo Instruments **LaserSource** represents the culmination of 23 years of experience developing current sources for laser diode test and measurement. By incorporating industry standard features with important improvements in instrument design, the **LaserSource** series of products are the most advanced laser diode drivers in the market today.



### Full Isolation Means No Ground Loops

Ground loops can plague instrument setups. In a major design improvement over traditional laser drivers, every input & output are optically and electrically isolated from each other, creating a

### 4200-DR Quick Specifications

| Model   | Milli-Amps  | Volts | Laser Connector |
|---------|-------------|-------|-----------------|
| 4201-DR | 50 / 100    | 10    | DB9             |
| 4205-DR | 250 / 500   | 10    | DB9             |
| 4220-DR | 1000 / 2000 | 5     | DB9             |

#### General Specifications

|                        |                                  |
|------------------------|----------------------------------|
| QCW Operation          | No                               |
| Remote Interfaces      | USB                              |
| Size (HxWxD) [in (mm)] | 1.82 (47) x 8.5 (215) x 11 (280) |

### 4300 Quick Specifications

| Model      | Amps | Volts | Laser Connector |
|------------|------|-------|-----------------|
| 4302       | 2    | 15    | DB9             |
| 4304       | 4    | 8     | DB9             |
| 4308       | 8    | 4     | DB9             |
| 4300-04-24 | 4    | 24    | DB9             |
| 4320       | 20   | 5     | 9W4             |
| 4320-14-13 | 14   | 13    | 9W4             |

Contact factory for other configurations

#### General Specifications

|                        |                                 |
|------------------------|---------------------------------|
| QCW Operation          | Optional                        |
| Remote Interfaces      | USB and RS-232                  |
| Size (HxWxD) [in (mm)] | 3.5 (90) x 8.5 (215) x 12 (305) |



## At a Glance

Dual Range (4200-DR)  
Low Noise  
100mA to 100 Amps  
Analog Modulation  
QCW Operation

versatile instrument that is unaffected by the electrical configuration of your diode or other test equipment. Even the photo-diode input is fully optically isolated from the laser output. No other driver on the market has this capability.

### 4-Wire Sense

The **4200-DR**, **4320** and **4400** drivers feature four-wire voltage sense for accurate device voltage measurements possible.

### Quasi-CW (QCW) Capable

The **4300** and **4400** offer quasi-CW (QCW) measurements (optional on **4300**), with trigger in and trigger out BNCs for synchronization with other instruments. Pulses can be generated using the internal function generator, or triggered externally. Adding QCW mode does not mean you lose CW operation: QCW-equipped instruments retain all the capabilities of their CW-only cousins.

### Easy to Use

Unlike other instruments, the **LaserSource** employs a dot-pixel character display provides easy-to-read status, readings, and errors. No digging through the manual to interpret error codes. No longer do you need to get out the manual to figure out how to set the current limit, or to understand what error 114 is; you can read it directly on the display in plain English.

## 4400 Quick Specifications

| Model       | Amps | Volts | Laser Connector |
|-------------|------|-------|-----------------|
| 4400-05-56  | 5    | 56    | 13W3            |
| 4400-08-28  | 8    | 28    | 13W3            |
| 4400-10-56  | 10   | 56    | 13W3            |
| 4400-15-14  | 15   | 14    | 13W3            |
| 4400-15-28  | 15   | 28    | 13W3            |
| 4400-20-48  | 20   | 48    | 13W3            |
| 4400-30-05  | 30   | 5     | 13W3            |
| 4400-30-14  | 30   | 14    | 13W3            |
| 4400-30-28  | 30   | 28    | 13W3            |
| 4400-40-24  | 40   | 24    | 13W3            |
| 4400-60-05  | 60   | 5     | Bus Bar         |
| 4400-60-14  | 60   | 14    | Bus Bar         |
| 4400-80-12  | 80   | 12    | Bus Bar         |
| 4400-100-05 | 100  | 5     | Bus Bar         |
| 4400-100-10 | 100  | 10    | Bus Bar         |

### General Specifications

|                        |                                |
|------------------------|--------------------------------|
| QCW Operation          | Yes                            |
| Remote Interfaces      | USB, RS-232, and Digital I/O   |
| Size (HxWxD) [in (mm)] | 3.5 (90) x 12 (305) x 14 (356) |

### Analog Modulation

All **LaserSources** support analog modulation, and hardware protection is active during modulation, protecting the laser diode regardless of the modulation input signal.



# Temperature Controllers

## 5240, 5300 & 5400 SERIES TECSOURCE

### TEMPERATURE CONTROLLERS

The **TECSource Series** of temperature controllers provide a range of capable temperature controllers with very stable control and an easy-to-use interface. With powers ranging from 28W to 960W, a **TECSource** temperature controller is sure to fit your test and measurement needs.

### Power to spare

With up to 960W versions available, buying temperature control power has never been less expensive. The extra power allows you to push your test setup farther without the typical costly upgrades normally associated with that amount of TEC power.



### Excellent Stability

With 0.004°C stability, the **TECSource** becomes a transparent part of the process and not another variable you need to manage.

### AutoTune

Every **TECSource** includes the AutoTune functionality for automatic PID calculation. Use as-is or as a starting point for further process refinements. Either way, you can quickly get to stable system configuration.

### Built-In Fan Controller

All controllers include a built-in adjustable DC power supply which can be used to power external fans often found in test fixtures.

### 5240/5300 Quick Specifications

| Model      | Amps | Volts | Output Connector | Therm | RTD & LM335 |
|------------|------|-------|------------------|-------|-------------|
| 5240       | 4    | 7     | DB15             | ●     |             |
| 5305       | 5    | 12    | DB15             | ●     | ●           |
| 5310       | 10   | 12    | DB15             | ●     | ●           |
| 5300-08-24 | 8    | 24    | DB15             | ●     | ●           |
| 5300-10-18 | 10   | 18    | DB15             | ●     | ●           |

#### General Specifications

|                        |   |
|------------------------|---|
| Remote Interfaces      | USB (all), RS-232 (5300 only)   |
| Size (HxWxD) [in (mm)] | 5240: 1.82 (47) x 8.5 (215) x 11 (280)<br>5300: 3.5 (90) x 8.5 (215) x 12 (305) |

## At a Glance

Automatic PID Calculation  
0.004°C Stability  
28W to 960W of TEC Power  
Built-in Fan Controller

### Fully Adjustable PID Control

All **TECSources** offer factory defined gain settings for temperature control. Need more control? Switch to PID gain and you have individual adjustment of each value in the PID circuit, providing fine adjustment of the control loop.

### Easy To Use

Unlike other instruments in their class, the **TECSource** employs a dot-pixel character display provides easy-to-read status, readings, and errors. No longer do you need to get out the manual to figure out how to set the current limit, or to understand what error 114 is; you can read it directly on the display in plain English. This allows the user interface to be greatly simplified and at the same time easier to use.

### Computer Interfaces

All **TECSources** come standard with a USB interface, and the **5300** and **5400** also include RS-232 interfaces. They are command set compatible with other manufacturers' drivers, allowing you to leverage any existing software you may have already developed.

## 5400 Quick Specifications

| Model      | Amps | Volts | Max Watts | Output Connector | Therm | RTD & LM335 |
|------------|------|-------|-----------|------------------|-------|-------------|
| 5400-15-28 | 15   | 28    | 420       | 17W2             | ●     | ●           |
| 5400-20-56 | 20   | 56    | 840       | 17W2             | ●     | ●           |
| 5400-30-28 | 30   | 28    | 960       | 17W2             | ●     | ●           |

### General Specifications

|                        |                                |
|------------------------|--------------------------------|
| Primary Sensors        | 3 Primary Sensor Inputs        |
| Auxiliary Sensors      | 4 Auxiliary Sensor Inputs      |
| Remote Interfaces      | USB, RS-232, and Digital I/O   |
| Size (HxWxD) [in (mm)] | 3.5 (90) x 12 (305) x 14 (356) |

### Measure Everything

Unlike many temperature controllers, the **TECSource** measures current, temperature, *and voltage*. Voltage measurement is often omitted in low cost temperature controllers. The **TECSource** is low cost, but not low performance.





# OEM Controllers

**COMBOPAK SERIES** LASER DIODE CONTROLLERS

**TECPAK SERIES** TEMPERATURE CONTROLLERS

**LASERPAK SERIES** LASER DIODE DRIVERS

The **Pak** Series controllers are Arroyo's OEM solution for laser and TEC control. Each offers similar capabilities to the comparable ComboSource, LaserSource or TECSource controller, but in a smaller, lower cost instrument for custom and embedded systems.



## 485 LaserPak Quick Specifications

| Model      | Amps | Volts | Output Connector |
|------------|------|-------|------------------|
| 485-0.1-10 | 0.1  | 10    | DB9              |
| 485-0.5-10 | 0.5  | 10    | DB9              |
| 485-01-10  | 1    | 10    | DB9              |
| 485-02-15  | 2    | 15    | DB9              |
| 485-04-08  | 4    | 8     | DB9              |
| 485-08-04  | 8    | 4     | DB9              |

### General Specifications

|                        |                                  |
|------------------------|----------------------------------|
| Remote Interfaces      | USB, RS-232, and Digital I/O     |
| Size (HxWxD) [in (mm)] | 3.0 (76) x 4.5 (114) x 8.5 (216) |

## Powerful Analog Interface

All **Paks** include USB computer interfaces for full PC control (485 and 585 Paks also include RS-232). Some **Paks** also feature an analog interface allowing control and monitoring of the Pak without the need for a PC. Configure your Pak over the computer interface during factory setup, and rest assured your device will be properly protected once it's in the field.

## 685 ComboPak Quick Specifications

| Model   | Amps | Volts | Output Connector |
|---------|------|-------|------------------|
| 685-0.1 | 0.1  | 10    | DB9              |
| 685-0.5 | 0.5  | 10    | DB9              |
| 685-01  | 1    | 10    | DB9              |
| 685-02  | 2    | 3.5   | DB9              |

### General Specifications

|                        |                                  |
|------------------------|----------------------------------|
| TEC Power, Connector   | 3A / 3.5V / 10.5W, DB15          |
| Sensors Supported      | Thermistor                       |
| Remote Interfaces      | USB and Digital I/O              |
| Size (HxWxD) [in (mm)] | 2.6 (66) x 4.5 (114) x 8.5 (216) |

## 585/586 TECPak Quick Specifications

| Model     | Amps | Volts | Max Watts | Output Connector | Therm & RTD | LM335 |
|-----------|------|-------|-----------|------------------|-------------|-------|
| 585-04-08 | 4    | 8     | 32        | DB15             | ●           |       |
| 585-05-12 | 5    | 12    | 60        | DB15             | ●           |       |
| 586-04-56 | 4    | 56    | 224       | 17W2             | ●           | ●     |
| 586-08-26 | 8    | 26    | 190       | 17W2             | ●           | ●     |
| 586-08-56 | 8    | 56    | 392       | 17W2             | ●           | ●     |
| 586-15-28 | 15   | 28    | 345       | 17W2             | ●           | ●     |

### General Specifications

|                        |   |
|------------------------|---|
| Remote Interfaces      | USB, RS-232, and Digital I/O  |
| Size (HxWxD) [in (mm)] | 585 - 3.0 (76) x 4.5 (114) x 8.5 (216)<br>586 - 3.2 (82) x 5.1 (130) x 11.5 (292) |

# Software

## ARROYOCONTROL & LABVIEW DRIVERS

**E**ver wanted to control your instruments from a PC, but didn't have the programming experience needed to write your own application? Enter ArroyoControl...

### ArroyoControl

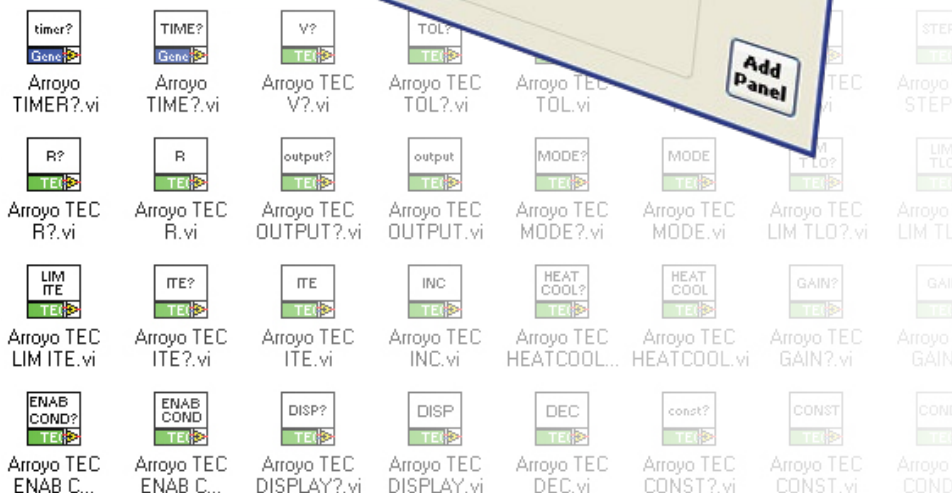
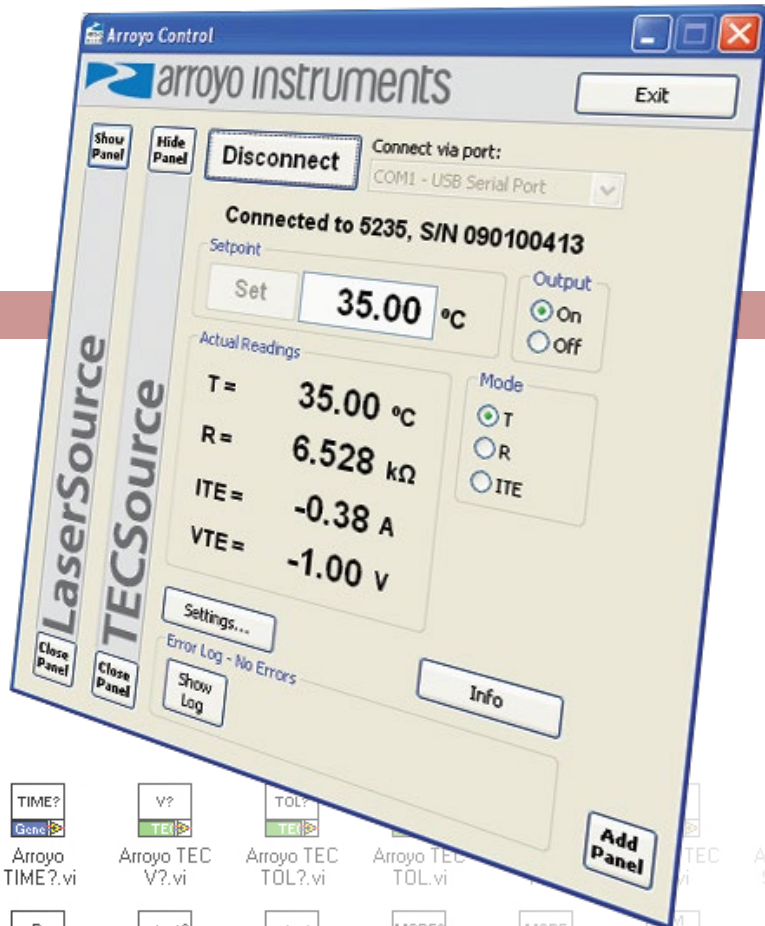
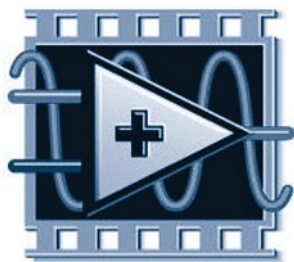
We're excited to have a solution for you! Our Arroyo Control application gives you full control over your laser driver or temperature controller, providing all the settings, limits, and adjustments of the instrument in an easy-to-use Windows application.

### Best of all, it's FREE!

With Arroyo Control, you can connect to multiple instruments, limited only by the size of your screen. You can mix and match the types of instruments controlled to fit your application, and all settings are automatically saved.

### LabVIEW Drivers

Developing applications in LabVIEW? We have a large library of sub-VIs that implement virtually every remote commands our controllers support. Available as a free download off our web site, and included on a CD with every product we ship.



# Laser & LED Fixtures

## 200, 210, 220 & 230 SERIES LASERMOUNTS

The Arroyo Instruments line of **LaserMount** device fixtures solves the problem of how to best hold and thermally manage a laser diode. From TO-Can to Butterfly to C-mount and beyond, we probably have a **LaserMount** that will fit your device needs. If you don't see one on this brochure, just ask...we're always adding new device support.

### Temperature Control

Many LaserMounts feature integrated Peltier (TEC) control, giving you a precise ability to thermally control your device. Whether you are trying to characterize device performance over temperature, or using temperature to wavelength tune your laser, you can rely on the LaserMount to give you excellent long term performance.



224 with opto-mech plate  
(cage system not included)



### Quick Specifications

|  | 203            | 205          | 207 | 213 | 215          | 224 | 226 | 234 |
|--|----------------|--------------|-----|-----|--------------|-----|-----|-----|
| <b>Primary Specifications</b>                            |                |              |     |     |              |     |     |     |
| Case TEC Control   | No             | Yes          | Yes | No  | Yes          | Yes | Yes | Yes |
| Thermal Capacity<br><i>Watts, 0°C ΔT at 25°C Ambient</i> | N/A            | 3.5<br>or 8* | 10  | N/A | 2<br>or 3.5* | 1.5 | 2.4 | 10  |
| Sensor   | 10K Thermistor |              |     |     |              |     |     |     |
| Nitrogen Purge   | No             | No           | No  | No  | No           | Yes | No  | Yes |
| Laser Connector  | DB9            |              |     |     |              |     |     |     |
| TEC Connector  | DB15           |              |     |     |              |     |     |     |
| Fan (12VDC)  | Opt            | Opt          | Opt | Opt | Opt          | No  | No  | Yes |



### 203 & 205 BF LaserMount

- Available with and without external TEC control
- Flexible pin assignments
- Optional fan base for increased performance



### 207 TEC LaserMount

- Medium power (10W) fiber pigtailed devices
- TEC control
- Quick-disconnect device harness



### 213 & 215 DIL LaserMount

- Available with and without external TEC control
- Flexible pin assignments



### 224 TEC To-Can LaserMount

- Nitrogen purge
- 3 & 4 pin devices
- Post mountable
- Toggle-switch configurable anode and cathode assignments



### 234 TEC To-Can LaserMount

- Nitrogen purge
- 2, 3 & 4 pin devices
- Post mountable
- Toggle-switch configurable anode and cathode assignments



### 226 TEC LED LaserMount

- TEC control
- Mounting hole for STAR LEDs and others
- Post-mountable



## Accessories to Match

Many of our LaserMounts have useful accessories to extend the capabilities of the mount. For example, our 224 & 226 have opto-mechanical interfaces for lens tubes and 30mm cage systems, while our 203, 205, 207, 213, & 215 mounts have fiber management trays to keep your fiber under control and fan bases to significantly improve the performance of the mount.



205 with fan base

Fan base



205 with fiber tray

Fiber tray



205 with cover

Cover



# High Power Fixtures

## 240 & 260 SERIES LASERMOUNTS

The 240 Series, and 262/264 **LaserMounts** feature a high thermal capacity heat sink and integrated fan to remove waste heat quickly and efficiently. The 242 and 264 **LaserMounts** also include high power TEC control, allowing you to control the case temperature of the device across a broad temperature range.

### High Power

Supporting 25 watts of thermal load (at ambient, 25°C set point), the 242 is capable of handling even high power C-Mount devices. The 244, 246, and 262 offer low thermal resistances, as low as 0.2°C/Watt on the 262. Our most powerful fixture, the 264, supports up to 30 watts of thermal load.



### Fits Your Application

The 242, 244, and 246 LaserMounts are designed to support industry standard C-Mount, HHL, and TO-3 packages right out of the box with no wiring or configuration needed. The 262 and 264 LaserMounts support a wide variety of devices from JDSU, nLight, Jenoptik, Lumics, and others, and can be customized to fit your exact application requirements.

### Quick Specifications

|  | 242            | 244 | 246 | 262        | 264 |
|--|----------------|-----|-----|------------|-----|
| Primary Specifications                                   |                |     |     |            |     |
| Case TEC Control   | Yes            | No  | No  | No         | Yes |
| Thermal Capacity<br><i>Watts, 0°C ΔT at 25°C Ambient</i> | 25             | N/A | N/A | N/A        | 30  |
| Sensor   | 10K Thermistor |     |     |            |     |
| Nitrogen Purge   | Yes            | No  | No  | Opt        | Opt |
| Laser Connector  | DB9            |     |     | DB9 or 9W4 |     |
| TEC Connector  | DB15           |     |     |            |     |
| Fan (12VDC)  | Yes            |     |     |            |     |







### 242 TEC C-Mount LaserMount

- Nitrogen purge
- Simple cathode connection
- -5°C to +85°C operation



### 244 HHL LaserMount

- Slide-on connector
- Pre-wired for standard devices



### 246 T0-3 LaserMount

- Custom socket to accommodate various lead lengths



### 262 LaserMount

- High power fiber pigtailed devices
- Custom mounting options
- Low 0.2°C/W thermal resistance



### 264 LaserMount

- Integrated TEC control
- High power fiber pigtailed devices
- Custom mounting options



## Customizing Your Cold Plate

Many applications and devices have a unique mounting pattern that is incompatible with our standard cold plates.

In these cases, we can often fabricate a custom mounting solution that meets the needs of your device.

Our 207, 262, 264, and 280 mounts support custom tooling options. Simply send us a data-sheet or mechanical drawing for the device, and we will review your requirements and provide a quote for your custom application.



# TECMounts

## 270 & 280 SERIES TECMOUNTS

The **270 & 280 Series TECMounts** provide a flexible heating and cooling platform designed to meet demanding temperature control requirements.

The **270 Series** is our water-cooled fixtures, providing high capacity with a small form factor. The **280 Series** are air cooled mounts. Both employ a bread-board-style mounting system, making them easy to integrate into a broad range of applications.



### Our Highest Power Mounts, Built for Your Application

The **270 & 280 Series** mounts were designed to provide high thermal capacities in a compact and functional enclosure, precision engineered and ready to go right out of the box. When using the mount with our 5300 or 5400 Series TECSOURCE temperature controllers and cables, setup couldn't be easier: select the appropriate mount from the menu, and the instrument auto-configures limits, gain, and fan settings for you.

### Customizing the Cold Plate

When our standard breadboard plates just don't fit, the cold plate can be custom machined to fit the exact hole pattern of your application. We can put mounting holes just where you need them so your device mounts directly to the plate, without the need for adapters or modification.

#### At a Glance

Large Control Surface  
High Thermal Capacity  
Flexible Mounting Plates

### Quick Specifications

|  | 274            | 284 | 286  |
|--|----------------|-----|------|
| <b>Primary Specifications</b>  |                |     |      |
| <b>Thermal Capacity</b><br><i>Watts, 25°C Plate and 25°C Ambient or 20°C Water</i> | 180            | 30  | 100  |
| <b>Sensor (Standard Version)</b>   | 10K Thermistor |     |      |
| <b>Plate Size</b>  | 3.2"           | 3"Ø | 4.2" |
| <b>Fan (12VDC)</b>   | No             | Yes |      |
| <b>Water Cooled</b>  | Yes            | No  |      |



**Caution**  
Hot Surface!

## High Temperature Option

An optional high temperature configuration is available, allowing for operation up to 150°C, but retaining the temperature range and thermal capacity of the standard mount. Because thermistors do not perform well at high temperatures, the sensor is replaced with a high accuracy Pt 100 RTD sensor.

## M-Series Mounting System

New with the **280 Series** mounts is a series of mounting accessories to accommodate the integration of the **280 Series** mounts onto your optical bread board or other mechanical system. The **286** ships standard with an accessory kit that includes solutions for table and post mounting, and a kit can be ordered separately for the **284**.



Optional 284-MKIT  
Accessory Kit

## Flexible Temperature Feedback

Some devices feature an integrated temperature sensor for precise temperature feedback. Others don't and require a feedback sensor integrated into the plate. The **270 & 280 Series** mounts handle both of these configurations with ease via an external (device) temperature input right on the side of the mount, and a switch to select between the plate-integrated (internal) temperature sensor and the device (external) temperature sensor. The **286** mount adds an auxiliary temperature sensor input for feedback back temperature measurements to controllers that support two sensor inputs, such as the 5400 TECSource.



284 on optional MR-1.50 Riser  
and MB-284 Base



286 on MB-286 Base  
and MP-2.00 Posts

# MultiMounts

## 7700 SERIES MULTIMOUNTS

**\* PRELIMINARY \***

### The 7700 Series MultiMount Modular Fixture System

provides a highly configurable rack-mounted fixturing system for diode heat sinking and temperature control. Each module bay in the 7700 mainframe can be individually configured, allowing for different laser types to be racked side-by-side. With each integration with the 7000 Series MultiSource, the MultiMounts provide a fast, flexible solution for rack-mounting arrays of laser diodes.

The **7700 Series** is intended to be used for light-source stations, laser qualification systems, life test systems, or even low-density burn-in applications. The **7700 Series** provides a range of fixtures that can be easily modified for different applications, enabling quick provisions for many multi-channel systems.



### Active Heating and Cooling

Some 700 MultiMounts support active temperature control using Peltier coolers for the most precise temperature possible.

### Copper Cold Plate

Cold plates can be machined from 100% copper with hard nickel plating for maximum performance and scratch resistance.

### Standardized Cable Connectors

Designed to work with the 7000 MultiMounts using standard DB-style cable connectors.

### Fiber Management

Many models include a fiber management system to maintain coiled fiber without pinching or damage.



*Butterfly  
Devices*



*TO-Can  
Devices*



*Fiber-Pigtailed  
Modules*



*High Power  
Devices*