

# 7244 SERIES

## MULTISOURCE MULTICHANNEL LASER DRIVER



The 7244 MultiSource laser diode drivers feature the same precision and protection found in our benchtop products, giving you a seamless transition from benchtop to high density. Optional analog modulation extends control outside the box, and Ethernet and USB provide easy computer connectivity options.



### OVERLAPPING LASER PROTECTION

Including safety interlock, ESD protection, hardware limits for current & voltage, and soft power-on.



### MULTIPLE OPERATING MODES

Choose from: ● Constant Current ● Constant Power ● Constant Voltage



### REMOTE VOLTAGE SENSING

Supports an extra pair of sensing wires to measure the operating voltage of your laser diode or LED.



### ANALOG MODULATION

Bandwidths up to 18 kHz.



### ETHERNET INTERFACE

The built-in Ethernet interface allows the 7244 to be easily accessed via a network and integrated into larger system applications.



### SIMPLE USER INTERFACE

Operational summary and individual channel information on an easy-to-read VFD display.



### ELECTRICALLY ISOLATED CHANNELS

Each channel is fully electronically isolated and has independent set points, limits, and operating parameters.

## AT-A-GLANCE

Current Ranges (per channel):

- ▶ 5 Amp / 56 Volt
- ▶ 8 Amp / 28 Volt
- ▶ 15 Amp / 14 Volt
- ▶ 30 Amp / 5 Volt

High Accuracy

- ▶ Up to 0.05% of reading  
+ 0.025% of scale

Low Noise

- ▶ As Low as <5 mA

Compliance Voltages

- ▶ Up to 56 Volts available

Remote Operation via PC

- ▶ Use your existing control code. Our command set is compatible with other manufacturers.
- ▶ USB
- ▶ Ethernet



## COMPACT MULTI-CHANNEL

*The 7244 MultiSource Laser Driver provides 4 channels of fully independent laser control in just 2U of rack space.*

*And maintains the high performance of our benchtop units!*

# 7244 MULTISOURCE LASER DRIVER SPECIFICATIONS

	7244-05-56	7244-08-28	7244-15-14	7244-30-05	
<b>Setpoint</b>	<b>Laser Current</b>				
	Range (mA)	0 - 5,000	0 - 8,000	0 - 15,000	0 - 30,000
	Resolution (mA)	0.1	0.2	0.5	1
	Accuracy ( $\pm$ [% set + mA])	0.05% + 1.25	0.05% + 2.0	0.05% + 3.75	0.05% + 7.5
	Stability (ppm, time)	< 10, 1 hour			
	Temperature Coeff (ppm/ $^{\circ}$ C)	50			
	Noise/Ripple (mA rms)	< 5	< 8	< 10	< 15
	Transients (mA)	20	30	50	100
	Compliance Voltage (V)	56	28	14	5
	<b>Photodiode Current</b>				
	Range ( $\mu$ A)	25 - 20,000			
	Resolution ( $\mu$ A)	1			
	Accuracy ( $\pm$ [% set + $\mu$ A])	0.05% + 2			
	Stability (ppm, time)	< 200, 24 hours			
	Temperature Coeff (ppm/ $^{\circ}$ C)	< 200			
	PD Bias (V)	-5V (fixed)			
	<b>Laser Voltage</b>				
	Range (V)	0 - 56	0 - 28	0 - 14	0 - 5
	Resolution (V)	0.001			
	Accuracy ( $\pm$ [% set + V])	0.05% + 0.005			
Stability (ppm, time)	< 50, 1 hour				
Temperature Coeff (ppm/ $^{\circ}$ C)	< 100				
<b>External Modulation</b>					
Input Range	0 - 10V, 10k $\Omega$				
Modulation Bandwidth (kHz)	18	15	12	10	
<b>Measurement</b>	<b>Laser Current</b>				
	Resolution (mA)	0.1	0.2	0.5	1
	Accuracy ( $\pm$ [% reading + mA])	0.05% + 1.0	0.05% + 1.6	0.05% + 3	0.05% + 6
	<b>Laser Voltage</b>				
	Resolution (V)	0.001			
	Accuracy ( $\pm$ [% reading + V])	0.05% + 0.005			
<b>Limits</b>	<b>Photodiode Current</b>				
	Resolution ( $\mu$ A)	0.1			
	Accuracy ( $\pm$ [% reading + $\mu$ A])	0.05% + 2			
<b>Limits</b>	<b>Laser Current</b>				
	Resolution (mA)	1			
	Accuracy ( $\pm$ [% of range])	1%			
	<b>Laser Voltage</b>				
Resolution (V)	0.1				
Accuracy ( $\pm$ [% of range])	2.5%				
<b>General</b>	Laser Connector	4 x 13W3, female			
	Computer Interface	USB 2.0 Full Speed (Type B), Ethernet (RJ45)			
	Power	90 - 240 V, 50 / 60 Hz			
	Size (H x W x D) [inches (mm)]	3.5 (89) x 19 (483) x 14.76 (375)			
	Operating Temperature	+10 $^{\circ}$ C to +40 $^{\circ}$ C			
	Storage Temperature	-20 $^{\circ}$ C to +60 $^{\circ}$ C			

www.arroyoinstruments.com

 **arroyo instruments**  
1201 Prospect Street, San Luis Obispo, CA 93401

**800-644-0416**

sales@arroyoinstruments.com