

485 SERIES

LASERPAK
OEM LASER DRIVER



The 485 LaserPak laser driver offers the same high-quality instrumentation that Arroyo Instruments benchtop units are known for, at one-third the size. LaserPak brings the great performance and laser protection features found on the LaserSource at a lower cost.



OVERLAPPING LASER PROTECTION

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



MULTIPLE OPERATING MODES

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



ROBUST ANALOG INTERFACE

Provides on/off control, status, and analog monitor of current and photodiode. Auxillary thermistor and voltage monitor input for extended monitoring.



ANALOG MODULATION

Bandwidths up to 65 kHz.

AT-A-GLANCE

Current Ranges:

- ▷ 2 Amp / 15 Volt
- ▷ 4 Amp / 8 Volt
- ▷ 8 Amp / 5 Volt
- ▷ Custom Configurations

High Accuracy

- ▷ Up to 0.05% of reading + 0.05% of scale

Low Noise

- ▷ As Low as <60 μ A

Compliance Voltages

- ▷ Up to 24 Volts available

Remote Operation via PC

- ▷ Use your existing control code. Our command set is compatible with other manufacturers.
- ▷ USB / RS-232 Connections



A FULL LASER SYSTEM

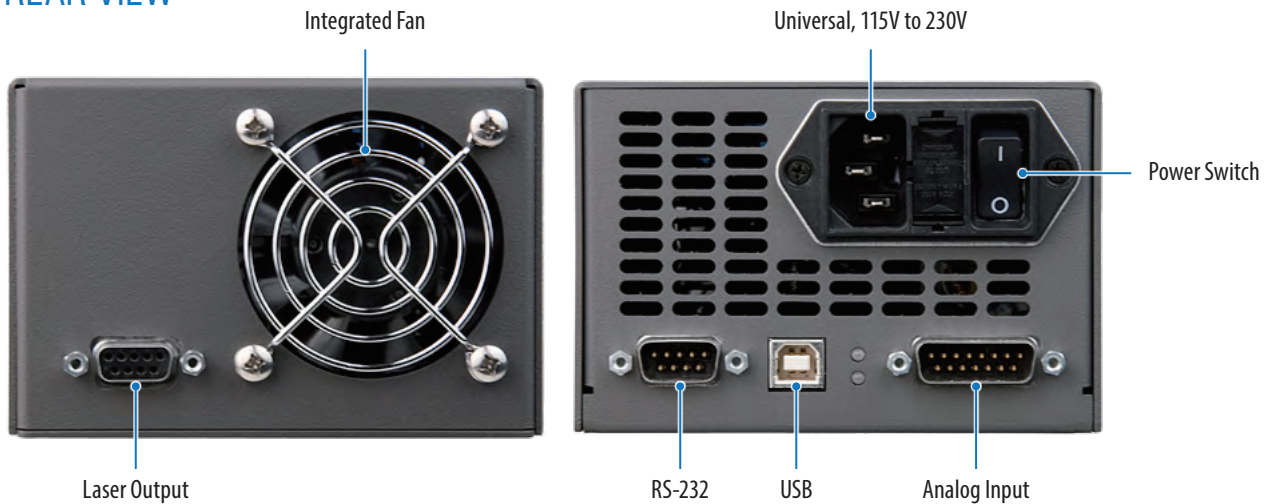
Pair the LaserPak with the Arroyo TEC Pak to create a low-cost combination laser system with all the power and accuracy of a much more expensive solution.

Build a full laser system that fits in your budget.

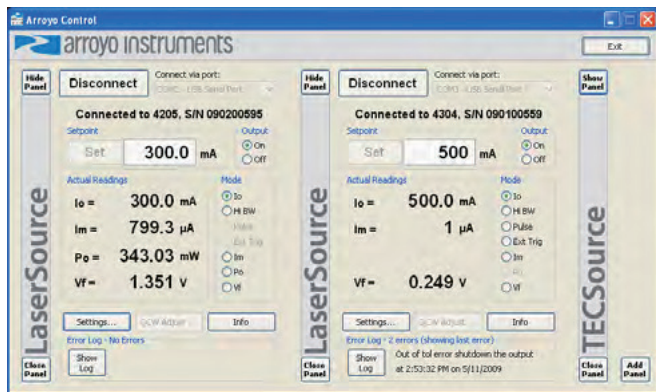
485 SERIES LASERPAK CW MODE SPECIFICATIONS

	485-02-15	485-04-08	485-08-05	
Setpoint	Laser Current			
	Range (mA)	0 – 2000	0 – 4000	0 – 8000
	Resolution (mA)	0.1	0.1	0.5
	Accuracy (\pm [% set+mA])	0.05% + 0.4	0.05% + 0.8	0.05% + 1.6
	Stability (ppm, time)	< 10, 1 hour		
	Temperature Coeff (ppm/ $^{\circ}$ C)	50		
	Noise/Ripple (μ A rms)	< 60	< 100	< 200
	Transients (μ A)	< 300	< 400	< 600
	Compliance Voltage (V)	15	8	5
	Photodiode Current			
	Range (μ A)	5 – 10,000		
	Resolution (μ A)	1		
	Accuracy (\pm [% set+ μ A])	0.05% + 1		
	Stability (ppm, time)	< 200, 24 hours		
Temperature Coeff (ppm/ $^{\circ}$ C)	< 200			
PD Bias (V)	Jumper selectable: No bias, -3V (default), -5V			
Laser Voltage				
Range (V)	0 – 15	0 – 8	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			
External Modulation				
Input Range	0 – 10V, 10k Ω			
Modulation Bandwidth (kHz)	65	50	40	
Measurement	Laser Current			
	Resolution (mA)	0.1	0.1	0.5
	Accuracy (\pm [% reading+mA])	0.05% + 0.4	0.05% + 0.8	0.05% + 1.6
	Laser Voltage			
	Resolution (V)	0.001		
Accuracy (\pm [% reading+V])	0.05% + 0.004			
Photodiode Current	Resolution (μ A)	1		
	Accuracy (\pm [% reading+ μ A])	0.05% + 2		
Limits	Laser Current			
	Resolution (mA)	1		
	Accuracy (\pm [% reading+mA])	20	40	80
	Laser Voltage			
Resolution (V)	0.1			
Accuracy (\pm % FS)	2.5%			
General	Laser Connector	DB-9, female		
	Computer Interface	USB 2.0 Full Speed (Type B), RS-232 (DB-9, male)		
	Power	115V / 230V, 50/60 Hz		
	Size (H x W x D) [inches (mm)]	3.0 (77) x 4.5 (115) x 8.5 (216)		
	Operating Temperature	+10 $^{\circ}$ C to +40 $^{\circ}$ C		
Storage Temperature	-20 $^{\circ}$ C to +60 $^{\circ}$ C			

REAR VIEW



ARROYO CONTROL



Control any Arroyo laser driver or temperature controller directly from your PC. Simply connect to your Arroyo device via USB or RS-232 and gain direct access to settings, device limits, and adjustments from an easy-to-use Windows interface. You can even connect to multiple instruments at the same time.

Download ArroyoControl for free from www.arroyoinstruments.com.

LabView drivers available.



ACCESSORIES

1402-RM

PAK SERIES RACK MOUNT KIT, 3 OR 5 UNITS

This rack mount kit will mount any 485 LaserPak or 585 TECPak controller. When positioned flat, the 1402-RM can hold three units in a 2U space.



Mount the controllers on their sides, and the 1402-RM can hold five units in a 5U space.



There is also mounting support for a 7-port USB hub as well as holes for securing and dressing wiring to the tray with cable ties.