

## 485-08-04 LaserPak, 8A



The **485-08-04** mirrors much of the functionality of our 4304 LaserSource, with 8 Amps and 4 Volts of output capability. With a lower cost and smaller footprint, the LaserPak fits better into embedded applications and other low cost applications.

### Analog or Computer -- Your Choice

The 485 Series LaserPaks provide both a robust analog interface as well as computer control (USB or RS232) for precise remote operation (you can even use both interface simultaneously). The analog interface provides on/off control, status, and analog monitor of current and voltage, while the computer interface provides complete control over all operating parameters.

### Analog Modulation

The 485-08-04's analog interface supports modulation rates up to 45kHz.

- 8A range
- 4V compliance
- 0.5mA resolution
- <200uA noise
- USB and RS-232 interfaces

### Develop with a LaserSource, Deploy with a LaserPak

The LaserPak is command-set compatible with the LaserSource and also features the identical laser interface. This means you can start your development with the LaserSource, a robust benchtop instrument with a full user interface and display, then move to the lower cost LaserPak as you roll out the application to production or your end-users.

### Simple Multi-Channel System

Using the [1402C-RM Rack Mount Tray](#), you can quickly rack groups of 3 or 5 Paks into a rack for a quick multi-channel system.



### USB & RS232 Computer Interfaces

Includes for USB and RS232 computer interfaces standard.



### Field Configurable AC Input

The LaserPak is configured in the factory for either 115V (485-08-04-115) or 230V (485-08-04-230) operation, but can be reconfigured in the field for either voltage.

## Specifications

<b>Model Numbers</b>	485-08-04-115 for 115 VAC 485-08-04-230 for 230 VAC <i>Field configurable</i>
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### CW Mode Specifications

<b>LASER CURRENT</b>	
Range (mA)	0 – 8000
Resolution (mA)	0.5
Accuracy ( $\pm$ [% set+mA])	0.05% + 1.6
Stability (ppm, time)	< 10, 1 hour
Temperature Coeff (ppm/°C)	50
Noise/Ripple ( $\mu$ A rms, low BW)	< 200
Transients ( $\mu$ A)	< 600
Compliance Voltage (V)	4
Modulation Bandwidth (kHz)	40
Modulation Input Range	0 – 10V, 10k $\Omega$
<b>PHOTODIODE CURRENT</b>	
Range ( $\mu$ A)	5 – 10000
Resolution ( $\mu$ A)	1
Accuracy ( $\pm$ [% set+ $\mu$ A])	0.05% + 1
Stability (ppm, time)	< 200, 24 hours
Temperature Coeff (ppm/°C)	< 200
PD Bias (V)	No Bias, -3V, or -5V (jumper)
<b>LASER VOLTAGE</b>	
Range (V)	0 – 4
Resolution (V)	0.001
Setpoint Accuracy ( $\pm$ [% set+V])	0.05% + 0.005
Measurement Accuracy ( $\pm$ [% reading+V])	0.05% + 0.004

### LIMITS

Current Limit Accuracy (mA)	80
Voltage Limit Accuracy ( $\pm$ % FS)	2.5%

### ANALOG INTERFACE

Inputs	On/off control, analog modulation input
Outputs	Analog current monitor, analog photodiode monitor, on/off state, stable state
Connector	DB-15, male

### GENERAL

Laser Connector	DB-9, female
Photodiode/Interlock	On LDD connector
Computer Interface	USB 2.0 Full Speed (Type B), RS-232 (DB-9, male)
Input Power	115V or 230V (jumper selectable), 50 / 60Hz
Size (H x W x D) [inches (mm)]	3.0 (77) x 4.5 (115) x 8.5 (216)
Operating Temperature	+10°C to +40°C
Storage Temperature	-20°C to +60°C