

485-02-15 LaserPak, 2A



The **485-02-15** mirrors much of the functionality of our 4302 LaserSource, with 2 Amps and 15 Voltages of output capability. With a lower cost and smaller footprint, the LaserPak fits better into embedded applications and other low cost applications.

High Compliance

The 485-02-15 features a high 15V compliance for higher voltage applications, such as LED testing or quantum cascade lasers (QCLs), as well as excellent performance with lower voltage laser diodes.

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 485-02-15's analog interface supports modulation rates up to 65kHz.

- 2A range
- 15V compliance
- 0.1mA resolution
- <60uA 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 (485-02-15-115) or 230V (485-02-15-230) operation, but can be reconfigured in the field for either voltage.

Specifications

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|----------------------|---|
| Model Numbers | 485-02-15-115 for 115 VAC 485-02-15-230 for 230 VAC <i>Field configurable</i> |
|----------------------|---|

CW Mode Specifications

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|---|-------------------------------|
| LASER CURRENT | |
| Range (mA) | 0 – 2000 |
| Resolution (mA) | 0.1 |
| Accuracy (\pm [% set+mA]) | 0.05% + 0.4 |
| Stability (ppm, time) | < 10, 1 hour |
| Temperature Coeff (ppm/°C) | 50 |
| Noise/Ripple (μ A rms, low BW) | < 60 |
| Transients (μ A) | < 300 |
| Compliance Voltage (V) | 15 |
| Modulation Bandwidth (kHz) | 65 |
| Modulation Input Range | 0 – 10V, 10k Ω |
| PHOTODIODE CURRENT | |
| Range (μ A) | 5 – 10000 |
| Resolution (μ A) | 1 |
| Accuracy (\pm [% set+ μ A]) | 0.05% + 1 |
| Stability (ppm, time) | < 200, 24 hours |
| Temperature Coeff (ppm/°C) | < 200 |
| PD Bias (V) | No Bias, -3V, or -5V (jumper) |
| LASER VOLTAGE | |
| Range (V) | 0 – 15 |
| Resolution (V) | 0.001 |
| Setpoint Accuracy (\pm [% set+V]) | 0.05% + 0.005 |
| Measurement Accuracy (\pm [% reading+V]) | 0.05% + 0.004 |

LIMITS

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|--------------------------------------|------|
| Current Limit Accuracy (mA) | 20 |
| 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 |