



# Laser Driver Configurations & compatibility with MOT5500 & MOT6500 series Laser Driver Modules

## Introduction

There are many different configurations of laser modules with integrated feedback photodiodes available from the various laser manufacturers. The most common 3- and 4-pin configurations are shown below, along with frequently used naming conventions. However, be aware that some manufacturers refer to their configurations by different “type” numbers so please refer to the specific datasheets for confirmation.

*Please also note that the 4-pin configuration is sometimes offered with the laser diode cathode connected to the case, in addition to the anode-to-case connection shown below.*

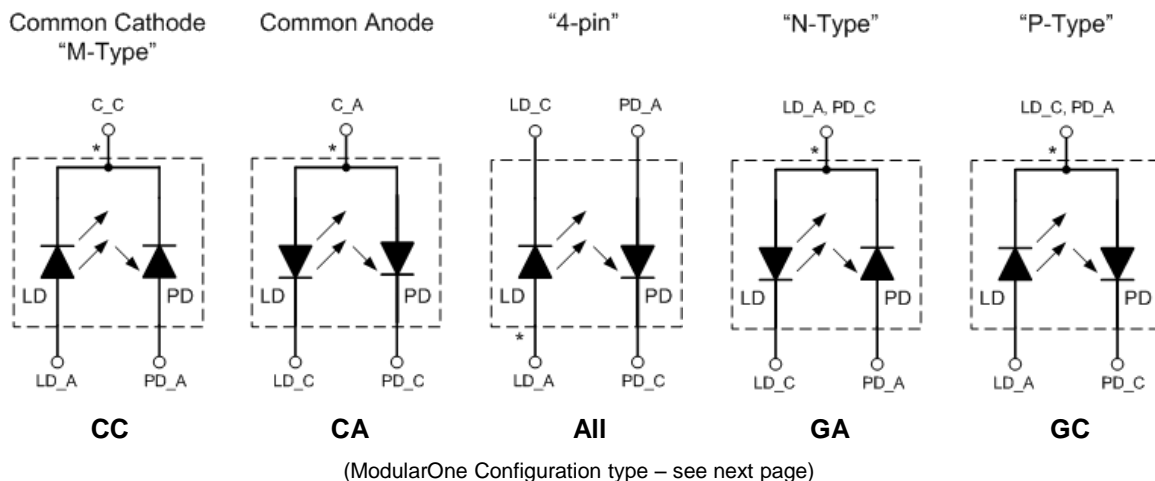


Figure 1. Typical Laser diode assembly configurations (refer to manufacturer’s data sheet for specific pin numbering and layout)

An important factor to consider when using any particular configuration is the common electrical connection to the case. Usually it is desirable to connect the case to system ground, and Modular One offers a driver for every configuration shown which permits the case to be grounded.

The following information allows you to select the module configuration best suited to your choice of laser assembly, and illustrates some typical hookup scenarios.



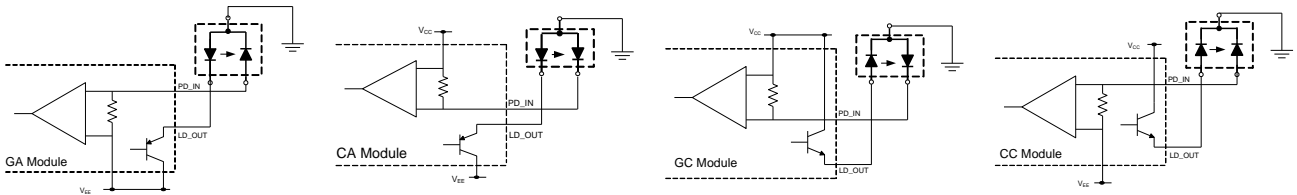
### Compatibility in Constant Power (CP) Mode

ModularOne's Laser Driver Modules feature a two-letter designator to show compatibility with specific configurations of laser assembly:

Module Designator	Compatibility
GA	Grounded Anode*, N-type, 4-pin
CA	Common Anode, 4-pin
GC	Grounded Cathode*, P-type, 4-pin
CC	Common Cathode, M-type, 4-pin

\* Refers to the laser diode connection

Typical application hookups from the module to the laser assembly are as shown:



### Compatibility in Constant Current (CC) Mode

In Constant Current Mode the feedback photodiode is not used and the unused photodiode connection pin(s) can be left open. Laser-only assemblies may also be used. Any of the modules can be used to drive these assemblies but again it may be preferable to pick a configuration in which the case can be grounded:

- Anode Grounded:           GA, CA Modules
- Cathode Grounded:       GC, CC Modules

If you have any questions about your configuration please contact us.

#### Contact Information:

ModularOne Technology  
 5902 Wessex Court  
 Parker TX 75002

Phone: 214-566-3708  
 Email: [info@modularonetechnology.com](mailto:info@modularonetechnology.com)  
 Web: [www.modularonetechnology.com](http://www.modularonetechnology.com)