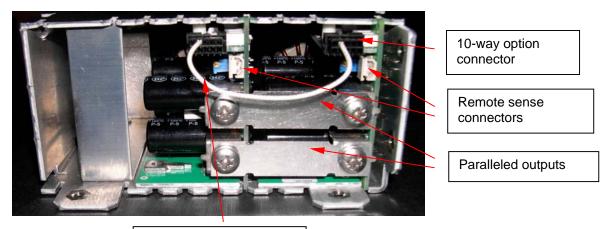
TDK-Lambda Vega Customer Applications Manual Section 1 – Z Modules

Z modules are a range of high current outputs. They are created from two standard vega modules that are paralleled together at the factory. The module output terminals are connected together with factory fitted busbars and 'N' options are fitted to both modules. The starpoint signals of both options are connected together with a factory fitted loom to provide active sharing of the total load current between the two individual modules.

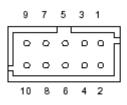
- Z modules can be specified with screw or faston output terminals
- There is no need to specify the N option when ordering they are automatically fitted to both modules.

The picture below shows the typical appearance of a Z module combination :-



Starpoint current share

'N' Option connector pinout



Pin No	Function
1	Module Inhibit +ve
2	Module Good Emitter
3	+Ve Sense. *1
4	Module Good Collector
5	Starpoint Parallel.
6	Module Good Collector
7	Starpoint Parallel.
8	Module Inhibit -Ve
9	-Ve Sense. *1
10	Module Inhibit +Ve

Note *1: Option board +ve sense and module +ve sense (2pin molex) are internally connected.

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The available Z modules are :-

Z Module	Standard modules used	Voltage Range	Current Rating	Total Slots
Z2	D1L + D1L	1.8~3.8V	95A	3
Z3	E1 + E1	1.8~3.8V	114A	4
Z4	D1H + D1H	3.9~5.5V	95A	3
Z6	E2 + D1H	3.9~5.5V	104.5A	3.5
Z7	D3 + D3	8.0~16.5V	45.6A	3
Z18	L1 + L1	4.2~5.5V	66.5A	2

Connecting to Z Modules

Screw Terminal option

Z2 thru' Z7 modules have M5 terminal screws. M5 ring tags suit wire sizes up to 16mm². Z18 module has M4 terminal screws. M4 ring tags suit wire sizes up to 10mm². Choose an appropriate wire size and ring tag to suit the current rating.

Faston Terminal option

Z2 thru' Z7 modules have four 9.5mm faston tabs for the +ve output and four 9.5mm faston tabs for the -ve output.

Z18 module has four 6.3mm faston tabs for the +ve output and four 6.3mm faston tabs for the -ve output.

Vega C.A.M Section 1 (connection details) provides guidance on cables and suitable ring tags.

Using Remote Sense with Z modules

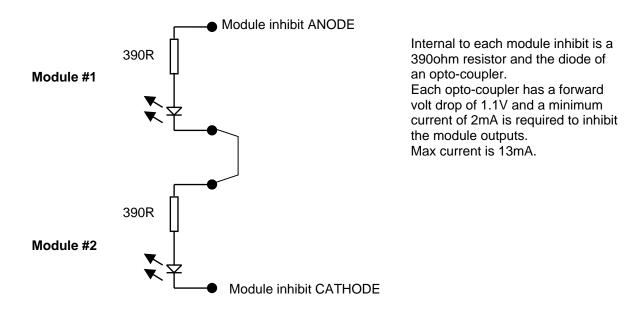
The remote sense connection of both modules should be connected to the same sensing point. This is best achieved by paralleling the module sense connections together and running a single pair of sense leads from either module to the load point.

Connect a wire between the +ve sense terminals of both 10-way option connectors (i.e pin 3 to pin 3). Connect a wire between the -ve sense terminals of both 10-way option connectors (i.e pin 9 to pin 9). Connect remote sense cables from the load to either of the 2-way sense connectors located just above the module output terminals (pin 1 is -ve sense, pin 2 is +ve sense).

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Using Module Inhibit signal with Z modules

The inhibit signals of the individual modules should be connected in series so that both modules inhibit simultaneaously.



Using Module Good signal with Z modules

Since the modules are directly connected in parallel, either of the two module good signals can be used. If remote sense is used, follow the connection guidelines above (see 'Using Remote Sense with Z modules') to ensure both modules are sensing at the same point.