

Serial connection of two single output converters

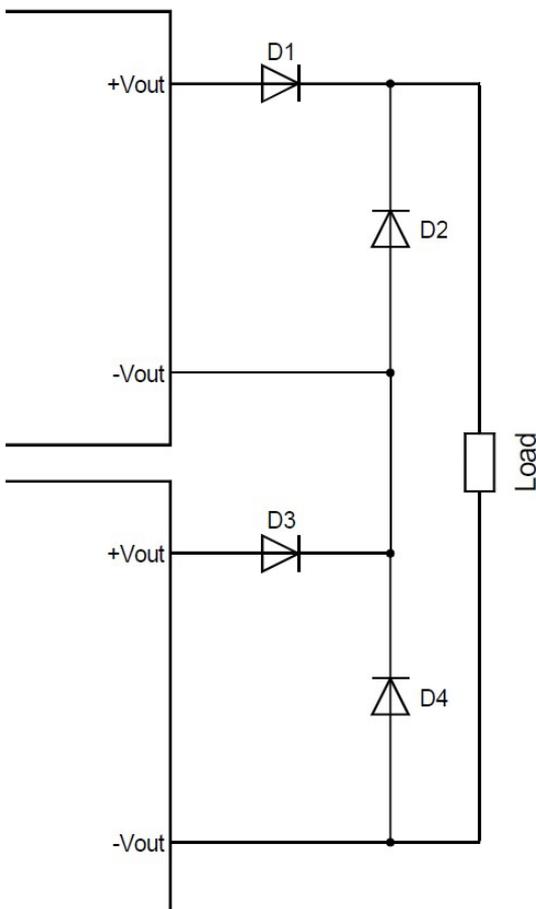
It is technically possible to connect two single output DC/DC converters or AC/DC power supplies in series on output side for increasing output voltage or generating dual output voltage. But it cannot be assumed, that any interconnection of several converters operates in each application condition as it would in a single operation (e.g. start-up behavior, regulation, ripple & noise, max. load conditions etc.). Our datasheet specifies the characteristic of a single converter at nominal values and full load but not in an interconnection.

If such an interconnection is the best solution to meet your application requirements, we recommend having it carefully tested inside your application and in accordance to the applicable safety regulations.

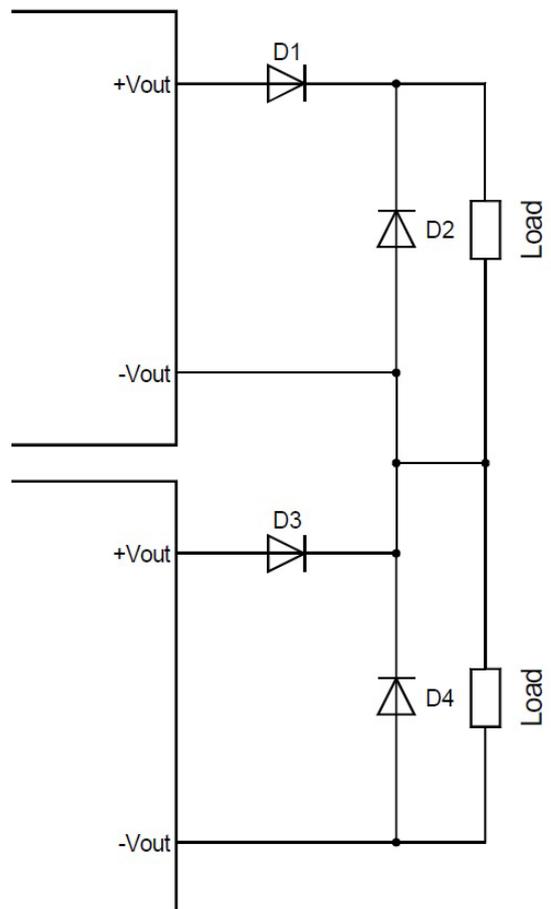
However, if you want to serial connect two devices, we strongly recommend using diodes as in the schematic below for preventing start-up issues.

Please check our product-selector (<https://www.tracopower.com/products/product-selector>) if we can provide another product fitting better to your requirements. We recommend considering the total costs as well.

Increasing output voltage



Generating dual output voltage



Serial connection of on dual output converter

It is technically possible to connect the outputs of one dual output DC/DC converter or AC/DC power supply in series for generating a higher single output voltage. But it cannot be assumed, that any interconnection operates in each application condition as it would in a dual operation (e.g. start-up behavior, regulation, ripple & noise, max. load conditions etc.).

If such an interconnection is the best solution to meet your application requirements, we recommend having it carefully tested inside your application and in accordance to the applicable safety regulations.

However, if you want to serial connect two outputs, we strongly recommend using freewheeling-diodes as in the schematic below for preventing regulation issues.

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Basic circuit diagram

