

## Using Boosters to Expand Output Power

### Overview

The VI-200 and MI-200 Family of DC-DC converters are available as driver or booster modules. The driver can be used as a standalone module, or in multi-kilowatt arrays by adding parallel boosters. Booster modules do not contain feedback or control circuitry, so it is necessary to connect the booster Gate In pin to the preceding driver or booster Gate Out, to synchronize operation. Drivers and boosters have identical power trains, although drivers close the voltage loop internally while boosters do not.

The concept behind driver/booster operation is that two power trains driven at the same frequency will inherently load-share if their outputs are tied together. Slaved modules require only one connection between units when their outputs are connected together; no trimming, adjustments or external components are required to achieve load sharing. The load sharing is dynamic and typically within 5 percent.

For additional information, see the heading *Electrical Considerations-High Power Arrays* in the *Chapter Module Do's and Don'ts*.

**IMPORTANT:** *IT IS IMPORTANT TO REMEMBER THAT WHEN USING BOOSTERS, THE INPUT VOLTAGE, OUTPUT VOLTAGE AND OUTPUT POWER OF THE BOOSTERS MUST BE THE SAME AS THE DRIVER.*

