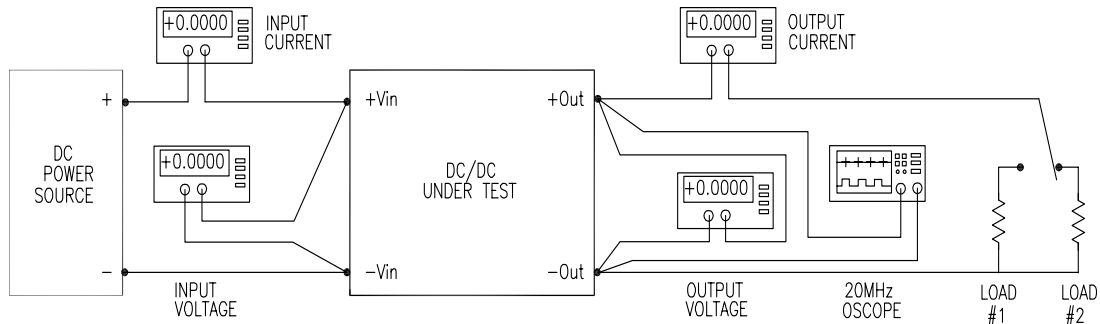


## General Test Set-Up

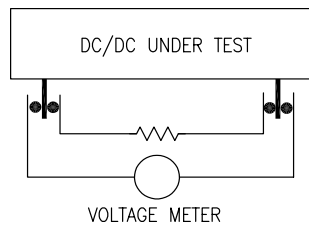
Figure 1 shows a general equipment set-up for testing DC/DC converters. Except where otherwise required, the following conditions should be applied.

- Nominal DC input voltage
- +25° C ambient temperature
- Full rated output load



## Measurements

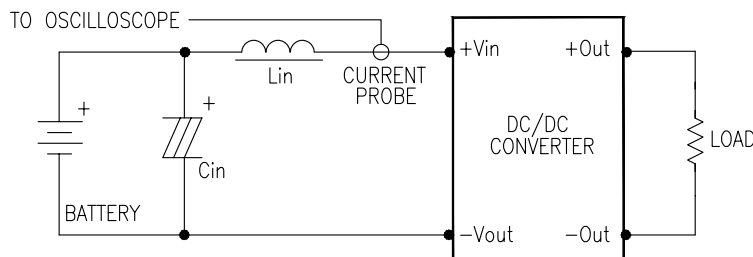
All connections to the converters should be made with great care, especially to the output pins. Standard four-terminal or Kelvin, measurement practices should always be observed in making DC/DC converters measurements. Figure 2 shows a voltage measurement being made from the output terminals of a DC/DC converter by means of separate contacts that do not carry load current. If contacts carrying load current are used for measurement, an erroneous reading of many millivolts can be resulted.



## Input Reflected-Ripple Current Test Setup

Input reflected-ripple current is measured with an inductor  $L_{in}$  ( $4.7\mu\text{H}$ ) and a capacitor  $C_{in}$  ( $220\mu\text{F}$ ,  $\text{ESR} < 1.0\ \Omega$  at  $100\ \text{KHz}$ ) to simulate source impedance.

Capacitor  $C_{in}$  offsets possible battery impedance. Current ripple is measured at the input terminals of the module, measurement bandwidth is  $0\text{-}500\ \text{KHz}$ .



Use a  $C_{out}$  0.47  $\mu\text{F}$  ceramic capacitor. Scope measurement should be made by using a BNC socket, measurement bandwidth is 0-20 MHz. Position the load between 2" and 2.5" from the DC/DC converter.

