

Manufacturers Statement:

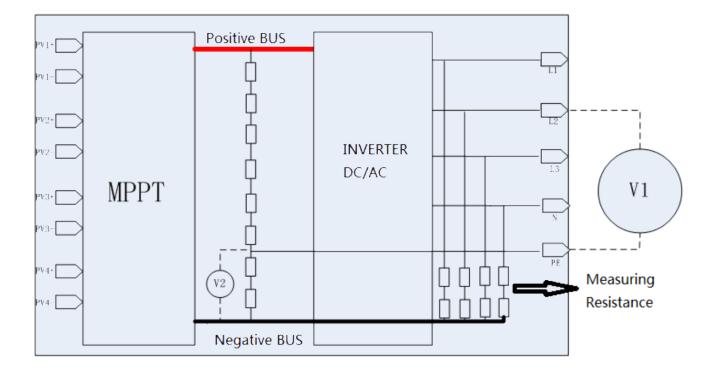
Description:

The follow documentation is to clarify why there is a DC voltage measured on AC side when the PVs are connected and AC is off.

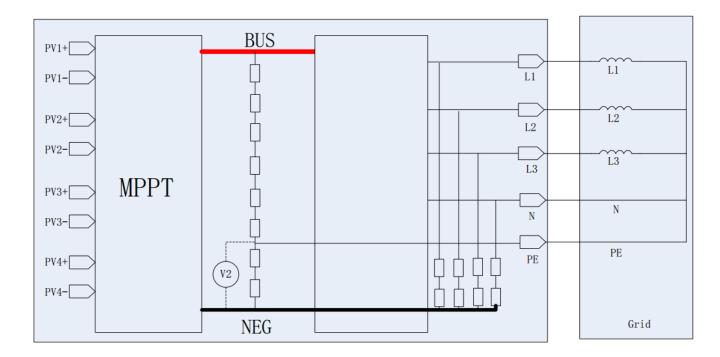
Voltage Sample Circuit

There is a sampling circuit (measuring resistance) in the inverter AC circuit. This circuit is to sample the voltage of AC grid. (Picture is seen below)

When the PV is connected to the inverter and the AC side is cut off, there will be a voltage between positive bus and negative bus because the DC is still connected. The measuring resistance is still connected to L1/L2/L3/N. At this point, you can test a DC voltage on the AC outputs. However, the measuring resistances have a high impedance and therefore the current will be negligible.



When the PV is connected to the inverter and the AC side is connected to the grid, the grid DC impedance will be very low. At this point you can consider the wires to be shorted for DC. So, the DC voltage between L1/L2/L3 and N/PE is 0.



This is also the reason why we ask customers to switch off both DC and AC before doing any maintenance on either the DC or AC side.