

Abstract

Electricity Meter with Isolated Shunt

5 An electricity meter including a voltage transformer and a shunt is provided. The electricity meter is coupled to a source of electricity and to a load via the shunt, and in particular the primary windings of the voltage transformer are coupled across first and second terminals of the shunt. The electricity meter includes a control device that is configured to measure a voltage generated in the secondary windings of the voltage
10 transformer and determine an amount of electricity consumed. In preferred embodiments the control device is configured to apply a temperature correction to the measured voltage and to use the resulting temperature corrected current to determine an amount of electricity consumed by the load.

[Figure 4]