

Technote 25 – AcquiSuite Analog Input with a CT

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Q: Could I use a raw 0-1 volt output CT with the analog inputs of the AcquiSuite ?

A: No, you can't do that. The output from a raw CT is an AC sine wave. To convert it to something useful, you must measure it using an RMS conversion. The A8811, A8812, and A8923-4 inputs measure DC voltage only.

Think of it this way, The AcquiSuite has a DC input similar to the DC setting on your handheld DVM. To measure a CT, you need to switch to the AC setting on the DVM. The AcquiSuite has no similar setting.

Also, the inputs on these devices can not handle negative voltages. (where the voltage seen on the input terminal is below the voltage of the ground terminal). If you attach an AC device to the input, 50% of the time it will be negative and beyond the range of the input.

Veris makes a 4-20mA output CT that will work. Among these are the H700 series CT. The CT has some circuitry in it that measure the RMS value from the ct, and convert it to a 4-20mA signal.

