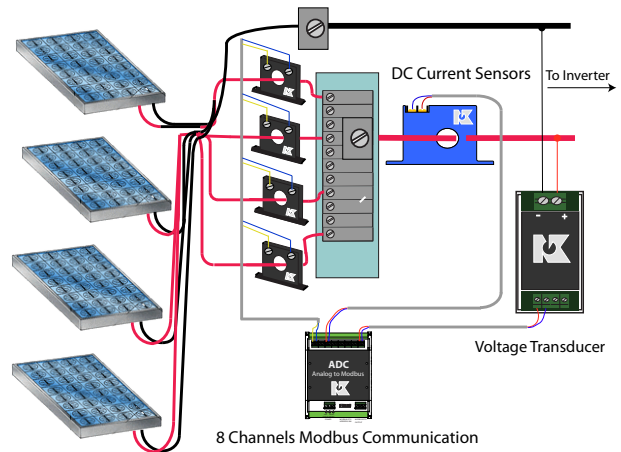


## Converting an Analog Signal to a Modbus Output

All industries are interested in improving their processes whether it affects quality or safety, or reduces cost. The use of sensors to continually measure and monitor the process is growing as plant managers see the benefits of keeping the process at the right temperature, scrapping less product due to break downs, and using the least amount of energy possible. Each sensor has a specific function and each are equally important to the process.

### Monitoring AC Current

- Photovoltaic Power Generation
- Plastics Injection Molders
- Semiconductor Fabrication
- Petroleum Refining
- Building Energy Management
- Wood Processing
- Water Treatment Facilities
- Mining Processes



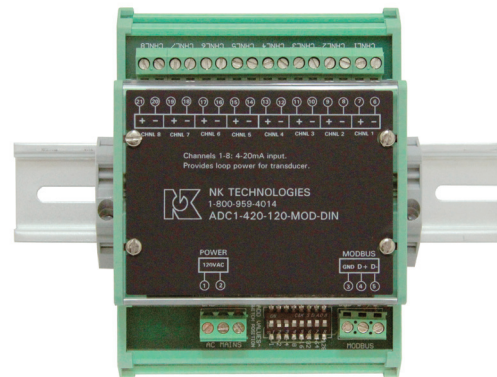
The ADC Series Analog to Digital Converter provides the perfect solution for monitoring a photovoltaic power production system that collects input from multiple sensors.

## ADC Series Digital Converters

The ADC Series allows up to eight 4–20 mA output signals to be connected to one converter in three combinations of signal types and powered from either 120 or 240 VAC. For sensors that use a two-wire design with 24 VDC connected in series with the sensor output, NK Technologies offers a model that will power and convert up to eight inputs.

Many 4–20 mA sensors use a separate power supply in a four-wire design (two for power input, and two for signal output). The ADC converter can be ordered with up to eight four-wire inputs or a combination of four two-wire and four four-wire inputs.

Each input signal can be read across the Modbus network. For example, a sensor producing 20mA with 100 amps through the window will be seen digitally as 100% with the same 100 amps being used. Each group of inputs are assigned one Modbus address.



The ADC converter allows for individually ranged devices to interface with the industry standard Modbus RTU serial protocol.