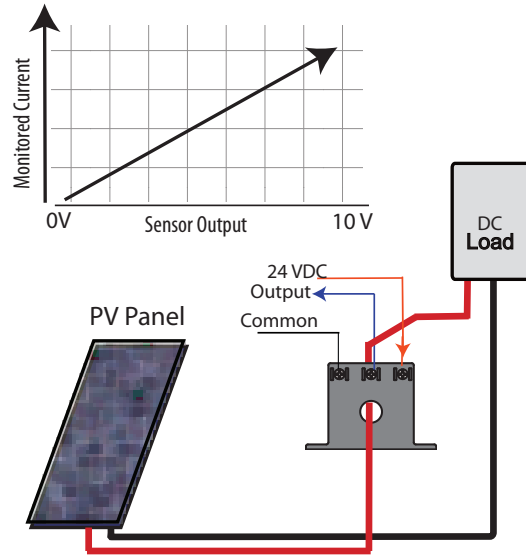


A Low-Cost Way to Monitor DC Current Using DT 3-Wire Sensors

DT series DC current transducers provide a low cost way of measuring DC current in a small and easy-to-install housing. These sensors are designed with a three-way method of monitoring DC current which uses a common point for both power supply and output signal. Using sensors designed in this way keeps current monitoring costs in check and are ideal for monitoring photovoltaic panel outputs especially in large projects such as solar “farms” where many panels and dozens of strings need to be monitored.

Other applications are in monitoring DC operated loads such as DC motors on conveyors which are moving hot freshly milled steel slabs. Measuring the current used by the conveyor drive motors can detect a shaft bearing failure which could damage the steel with a scratch or groove, requiring the steel to be remelted and remilled.

Current installations of DC three-wire sensors have prevented this expensive loss of production and the mill operators are planning to add the sensors to their other production lines.



Monitoring Photovoltaic Panels with a DC Sensor

NK Technologies’ DT Series of DC Current Transducers

The newest addition to NK Technologies’ DT Series of DC current transducers is a product in a very compact housing with a DC voltage output, either 0–5 or 0–10 volts. This new design uses a common point for both power supply and output signal, and is factory calibrated for a single current range. This three wire method for DC current measurement, keeps costs in check for projects where many sensors are needed.

The DT Series complements the DLT Series of 4–20 mA current output sensors. Where the controllers specified cannot read current output sensors, the DT 3 wire products provide the same space saving properties without the need to add an external dropping resistor, consequently removing another place where trouble could occur.

Reliability is key in all monitoring applications, and there are gains in reliability whenever the number of connection points can be reduced. With the addition of this new series of sensors, NK Technologies has provided the system designer even more choices to measure DC current.

