



# Transmission of Measuring Signals and Power Supply of Remote Sensors

Penin A., Sidorenko A.

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## Abstract

The invariant relationship between the sets of load conductivity values at the output of the two or three wire DC communication line and the corresponding conductivity values at the input of this line is shown. This relationship does not depend on parameters of communication line, accuracy of measuring devices. It allows transmitting signals over the two and three wire communication lines. Also, it is shown that in the two wire DC power supply line with loss resistances it is possible to form the output characteristic of this line, as the source of constant load current, by negative value of one of lateral resistance.