

LVDT digital controller for inductive transducers

At the SPS IPC Drives 2018, Eddylab shows its LVDT (linear variable differential transformer) digital controller. The device outputs the sensor signal via CAN network.

□

The company can be found in hall 4, stand 301 at SPS IPC Drives exhibition in Nuremberg, Germany (Photo: Eddylab)

The linearity optimization represents the main issue to LVDT transducers. The linearity is typically at a value of 0,3 %, values of less than 0,1 % are only being offered by a few manufacturers. The LVDT digital controller from Eddylab, to which either one or two sensors can be connected, now improves the linearity of inductive displacement transducers. The digital controller conditions, digitizes, and linearizes the sensor signal and outputs it as a voltage or current signal as well as via CAN network or USB interface. It is used, for example, in position monitoring in valves of power plants. Here, the LVDT digital controllers ensure that several valves always have exactly the same opening width in synchronous operation. This is essential in order to avoid undesirable effects and load conditions in the pipelines of the plant.

The readings of the product can be visualized and configured using the analysis software specially developed by the company. The software tool offers the user not only the basic functions oscilloscope, data-logger, and Fast Fourier Transformation (FFT), but also a module for customer calibration within the application. For this purpose, a reference sensor is connected to the digital controller, which detects existing errors. "We want to offer our customers new functionalities and significantly increase the performance of the Eddylab sensors through the digital controller," said Michael Reiter, Managing Director of the company.

[CW](#)