All-rounder for the lab or production line

One calibration source, six measured variables

Measuring instruments and transducers have to be precisely calibrated for the respective measuring ranges before use, and in commercial applications they also require periodic recalibration. Often this calls for several high-precision calibration sources for different measured variables, and specially trained personnel. All this is expensive, demands training time, and takes up space in the laboratory or on the production line. The DIGISTANT 4463 high-precision calibration source from burster präzisionsmesstechnik provides a solution by combining six common measured variables in one device. A voltage range of +/-100 nV up to +/-100 V with a basic accuracy (B) of 0.002 % can be specified, or for example a current of +/‑100 nA ... +/-50 mA, 0.005 % B, or frequencies from 10 mHz to 100 kHz and a true ohmic resistance simulation of 10 Ω to 300 kΩ. Thermocouples (12 types from 0.1 K B) or RTDs (resistance temperature detectors such as Pt100 ... Pt1000, Ni100 ... Ni1000) can also be calibrated. Four-wire technology reduces uncertainties to a minimum. An optional Pt100 external reference junction optimizes the temperature simulation. Up to 32 fully automatic test routines, each with up to 100 value/time sequences, allow rapid testing of sensor cards, measuring instruments, PC expansion cards etc. at the touch of a button. In the laboratory or on the production line, measuring equipment can be conveniently tested in multiple measuring ranges using just one compact calibration source.

Flexible use made easy

An RS-232, USB and Ethernet port are provided for connecting to existing control systems and databases (see fig. 2). Proprietary evaluation software was deliberately avoided. Instead, DIGISTANT 4463 offers a free driver for LabView. This allows users to work with their familiar and powerful standard software, making integration easier and drastically reducing training time. The calibration source is supplied with a DAkkS certificate, and can be used anywhere in the world with a supply voltage of 230/115 V AC (50/60 Hz). When the calibration period expires, the calibration source can be recalibrated in the manufacturer’s DAkkS-certified calibration laboratory.

Company box: About burster

burster supplies measuring technology ranging from individual sensors to system solutions. Its customers are mainly in mechanical and plant engineering, automation, the automotive industry and its suppliers, electrical and electronic engineering and the chemicals industry. The range includes measuring instruments and testers as well as standard sensors for mechanical and electrical measured values, such as load cells, pressure, torque and displacement sensors, milli and mega ohmmeters, and resistance decade boxes. In addition, individual custom OEM solutions are possible, including for many other sectors and future or niche markets such as medical engineering and biotechnology. Many years of experience in designing and building measuring sensors and instruments guarantee optimum solutions every time. Developed and manufactured in Germany, burster sensors, amplifiers and transmitter modules, precision instruments and measuring systems for sensor signal processing are shipped to customers all around the world.

Further details are available at: <https://www.burster.de//de/kalibriergeraete/praezisions-kalibrierquellen-fuer-prueffeld-labor/p/detail/digistantr-4463>