

## **Voltage Data Logger PCE-VR 10**



#### Voltage data logger

Voltage data logger for 0 ... 3000 mV / 3 input channels / adjustable storage rate / backlit LCD / SD-card memory / storage as XLS

The voltage data logger from PCE Instruments is used to record 0 ... 3000 mV signals via up to three input channels. The voltage data logger stores the measured voltages on an SD card in Excel format. In order to record also higher voltage in the range between 0 ... 10 V with the help of the voltage data logger, a voltage divider can be used. The measuring voltages are transmitted via plug-in clamps to the datalogger, which presents the corresponding values directly on the display and at the same time stores them in the memory with the corresponding time stamp. The scaling of the measuring signal is not necessary, since the measured values are stored directly as an mV measured value. In Excel, the scaling can then be carried out quite conveniently manually. The voltage data logger thus determines the pure raw data of the sensors whereby any further processing and data evaluation can be done very flexibly via spreadsheet programs

Excel.

In addition to storing the measured values, the voltage data logger presents the values of the respective voltage channels on the large backlit LC display. The maximum resolution here is 0.1 mV with an accuracy of 0.5% + 2 mV. The voltage data logger is powered by 6 AA 1.5 V batteries or a power supply. To visualize the live measured values, the voltage data logger from PCE Instruments can be connected to the PC via the serial interface. The storage intervals are adjustable in several stages between 1 second and 600 seconds. Due to the robust housing, the voltage data logger can be both, placed on a table and mounted on a wall. This allows to carry out mobile measurements in a wide variety of locations as well as stationary measurements when, for example, the recording should be performed permanently on only one system.

#### Application areas for voltage data loggers

If the measured values and data have to be recorded over a longer period of time, compared and later documented, in the majority of cases, the data loggers, which are usually specially designed for the corresponding values, are suitable best of all. Often it goes about parameters such as temperature, humidity, pressure, energy, light, pollutants or current and voltage. The data loggers then consist of a storage medium such as, for example, an SD card, an

interface (USB, Bluetooth, WLAN ...) and at least one channel for the corresponding measured variable. Often it is also possible to record different measurands simultaneously via several channels.

The voltage data logger from PCE Instruments is specially designed for the voltage measurement and is therefore suitable for parallel recording of voltages on maximum three voltage channels. With the voltage data logger, for example, the sensor data which can be read out via a voltage output, are recorded. The measuring range of up to 3000 mV can be extended for the sensors with the higher voltages for up to 10 V via a voltage divider (see optional accessories). If, for example, physical variables such as temperature, pressure and level are to be simultaneously recorded and compared in one system, the corresponding sensors can be connected to the data logger to display and document the changes and interdependencies of the three variables after the measurement. Also, an adjustment of the identical sensors at one measurement point can be performed with the voltage data logger. Thus, before the permanent installation and continuous measurement, the sensor errors can be directly excluded. Air pressures before and after filters can also be checked with the help of the suitable sensors to check the filter function. Voltage data loggers are therefore suitable for a wide variety of applications in industry, maintenance and repair or research and development.

- memory on an SD card
- 3 measuring channels
- 0 ... 3000 mV input
- clamp connection strips
- storage as XLS file
- large backlit display

### **Specifications:**

Measuring range 0 ... 300 mV Resolution 0.1 mV

Accuracy  $\pm (0.5\% + 0.2 \text{ mV})$  Measuring range  $0 \dots 3000 \text{ mV}$ 

Resolution 1 mV

Accuracy  $\pm (0.5\% + 2 \text{ mV})$ 

Storage rate 1, 2, 5, 10, 30, 60, 120, 300, 600 seconds

Storage SD card up to 16 GB LCD with lighting

Refresh rate display 1s

Power supply 6 x 1.5V AA battery

Plug-in power supply 9 V / 800 mA

Operating conditions 0 ...  $50^{\circ}$ C / 32 ...  $122^{\circ}$ F, <85% rh Dimensions  $132 \times 80 \times 32$  mm

Dimensions  $132 \times 80 \times 32 \text{ mm}$ Weight About 190 g / < 1 lb

# **Delivery Scope**

- 1 x Voltage Data Logger PCE-VR 10
- 3 x Terminals
- 1 x SD memory card
- 1 x Wall holder
- 1 x Adhesive pad 1 x User manual