Digital amplifier
cable version with USB

Description

The amplifier EZE22 allows the connection of a sensor via the USB interface to a PC, and the evaluation with the software VASUSB. The measured values are transferred and visualized by the software via the USB interface.

Thus, sensor signals with up to 16 Bit resolution are digitized. With the high dynamics of up to 5000 measurements/s, fastest measuring tasks are realizable.

If 100% calibration control is integrated in the sensor (see data sheet), an automatic calibration can be accomplished, which is auditable at any time (monitoring of the measuring chain).

The practical housing with a high level of protection allows fast fixation by a screwing clamp. In larger sensors, the circuit board module can be integrated as well.

The connection to LabView or integration into your own programs is also possible with a freely available driver package.

Different sensors types are scheduled for the connection:

Features

- Supply via USB
- Up to 16 Bit resolution
- Input for mV, V and mA (2 and 3 wire)
- Fast measurement upt to 5000/s
- Calibration and control trigger via software (optional)
- Integrable in many sensors by SMD miniaturization
- Compact design
- Easy handling
- Protection type IP 67
- Input filter for mush killing
- Usable in heavy industrie
- Free evaluation software VASUSB for PC

Applications

- Industrial weighing technology
- Force monitoring and measurement on machines

Option	EZE22XUSB1	EZE22XUSB2	EZE22XUSB3
Power supply	5 V - 20 mA	12 V $\leq$ 200 mA	12 V $\leq$ 200 mA
Input signal	±3 mV/V	±5 V/±10 V	0/4...20 mA

Model: EZE22

Technical data

Type	USB amplifier, 2 channels			
Order-No.	EZE22XUSB1	EZE22XUSB2	EZE22XUSB3	EZE22XUSB4
Supply from USB	12...30 V DC ≤600 mA			
Excitation	5 V ≤20 mA 12 V ≤200 mA	12 V ≤200 mA	12 V ≤200 mA	12 V ≤200 mA
Measured values	0...±3 mV/V = ±30000 Digit	0...±5 V = ±25000 Digit	0...±10 V = ±25000 Digit	0/4...20 mA = 0/4000…20000 Digit
Resolution	1 mV/V = 10000 Digit	1 V = 5000 Digit	1 V = 2500 Digit	1 mA = 1000 Digit
Zero point	0 Digits			
Input resistance	> 1 MΩ	> 1 MΩ	> 1 MΩ	62 Ω (Bürde)
Measuring rate	max. 5000 Mess./s			
Accuracy	±32 Digits			
Linearity error	±32 Digits			
Nominal temperature	+10°C … +40°C			
Service temperature	0°C… +50°C			
Storage temperature	-10°C… +70°C			
Temperatureinfluss	4 Bit/10 K			
Noise emission	acc. to EN 61326			
Noise immunity	acc. to EN 61326			
Protection type (acc. to EN 60529/IEC 529)	IP 40			
Housing – Material – Dimensions	Aluminum 125 x 80 x 57 mm			
Max. cable length to sensor	1 m (max. 3 m)			
USB cable length	3 m			
Option	Measuring and evaluation softw are VASUSB			

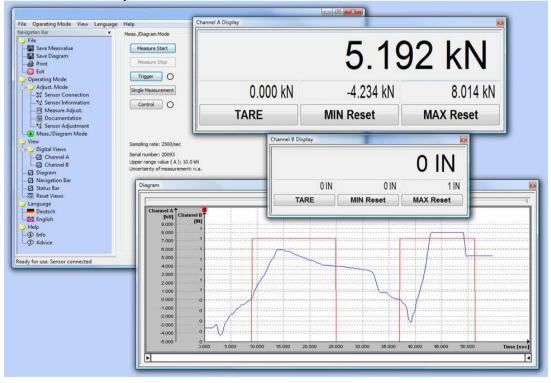## PC software for USB amplifier EZE21

Fig: PC software VASUSB for EZE21

Features Software

- Easy configuration and evaluation
- Graphical display of max. 2 measuring channels
- Amplifier set and controlled
- Automatic scaling of the Y-axis
- Automatic memory function of the measured values as CSV and BMP file

Conversion in physical variables	included
Simultaneous measurement	Up to 2 input channels
Graphical presentation of the measured variables	included
Automatic or manual storage in a CSV- and BMP-file	included
Print-out of the diagram with date and definable headline	included
Scaling function of the input variable to any display value with unit	included
Resettable minimum value memory for any measured variable	included
Resettable maximum value memory for any measured variable	included
Variable average determination	included
Tare for each measured value	included

Desciption

Configuration and evaluation software for analysis and graphical presentation on a PC. The software allows direct read-in of measured data into a text file in CSV-Format through the USB-Port of a PC. This enables further analyses with a commercially available spreadsheet program at any time.
The configuration and readout of configuration data and the testing of the communication protocol with the EZE21 can be done by using the evaluation software.

Technical data

Interface	USB
System requirements	Windows '00/ '03/ '08/ XP/ Vista 32/64/ 7 32/64®3 Single-Core up 2.0 GHz (without Diagram) Dual-Core up 1.8 GHz (with Diagram)

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