

nano box USB

compact digital controller unit

Concept:

USB devices are being used more frequently in lab environments. piezosystem jena is now offering the nano box USB as an stand alone piezo amplifier with 16bit D/A resolution. The small sized and powerful amplifier comes with a USB 2.0 interface and a list of useful commands.

No additional manual or analog inputs are necessary. The simple connection from USB to a PC enables fast implementation of high precision positioning tasks for any workplace.

Specials:

The **nano box USB** is designed mainly to control piezo electrical actuators in static and low dynamic applications. The low noise level of the output signal of only 3mV allows extremely precise control of high resolution actuators over the entire range of motion. A unique feature is the integrated closed loop controller for piezo electrical actuators with strain gauge sensors. The nano box USB can be used in combination with piezo electric actuators which have the suffix "D" on their part number.

Interfaces:

The amplifier nano box USB is fully enclosed by a robust metallic housing. An external wide range power supply module (90V up to 264V) is included. The control interface is made for USB 2.0. The digital interfaces have a 16bit resolution. A set of commands and LabView drivers are included.



image: nano box USB

Product highlights:

- single-channel piezo controller
- small size
- 10mA permanent output current
- strain gauge sensor controller
- low-noise output signal
- USB 2.0 interface
- 16bit resolution

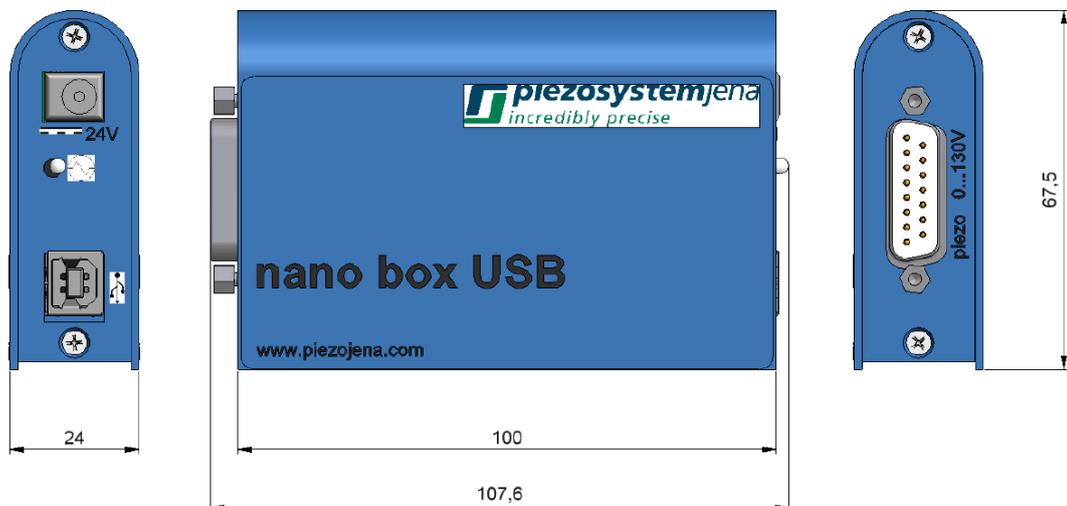
Applications:

- Laboratory applications
- Nano positioning
- Wafer handling
- PC controlled positioning

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Technical data

digital controller unit	unit	nano box USB
part no.		E-320-00
number of channels	-	1
sensor controller	-	strain gage sensor
output voltage	V	0...130V
output current (continuous)	mA	10
voltage noise	-	< 3mV _{RMS} @500Hz
connector output voltage	-	D-Sub 15pin
interface	-	USB 2.0
command parameter resolution	-	16Bit
software	-	LabView, Software example
DC-voltage connector (interface)	-	2.1mm Barrel type
operating temperature range	-	5°C to 35°C (41F to 95F)
main supply	-	24VDC/0.5A (wide range power supply 90 to 264VAC included)
special features	-	short circuit proof
dimensions (LxWxH)	mm	107.5x24x67.5



drawing: nano box USB