

**electronic • analoge • OEM**

## **nano box**

- single-channel piezo amplifier
- built in function generator
- 8mA permanent output current
- modulation input
- low-noise output signal
- small size

### Applications:

- Laboratory applications
- automation
- prototyping



fig.: nano box

### Concept

The **nano box** is designed as an stand alone analog piezo amplifier for OEM applications. With an excellent price/value ratio, the **nano box** is recommended for the use in standard tasks for positioning applications with low dynamic requirements.

Especially the small dimensions and the robust metallic housing makes the **nano box** amplifier suitable for an easy integration into industrial applications as well in laboratory use.

### Specials

The **nano box** 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 built in function generator with a triangular waveform from 3 to 35Hz. The voltage offset can be adjusted by an analog modulation signal (0 to +5V) or manual by using the potentiometer knob on the front panel.

### Casing

The amplifier **nano box** is fully enclosed by a robust metallic housing. An external wide range power supply module (90V up to 264V) is included.

All connectors and control switches are easily accessible on front and backside.

### Technical data:

| part no.                         | unit | nano box<br>E-310-00   |
|----------------------------------|------|--|
| number of channels               | -    | 1  |
| output voltage                   | V    | 0...+150   |
| output current (continuous)      | mA   | 8  |
| voltage noise                    | -    | <3mV <sub>RMS</sub> @500Hz   |
| connector output voltage         | -    | LEMO 0S.302  |
| modulation input                 | -    | 0 ... +5V, BNC   |
| inner resistance                 | kΩ   | 5k   |
| dimensions (l x w x h)           | mm   | 130x55x24  |
| built in function generator      | -    | 2 ... 35 Hz (triangular wave)  |
| weight                           | g    | 175  |
| DC-voltage connector (interface) | mm   | 2.1mm barrel type  |
| operating temperature range      | -    | 5°C - 35°C (41°F to 95°F)  |
| main supply                      | -    | 9VDC+/10%/0.25A (wide range power supply 90 to 264VAC (included in shipment) |
| special features                 | -    | short circuit proof  |