

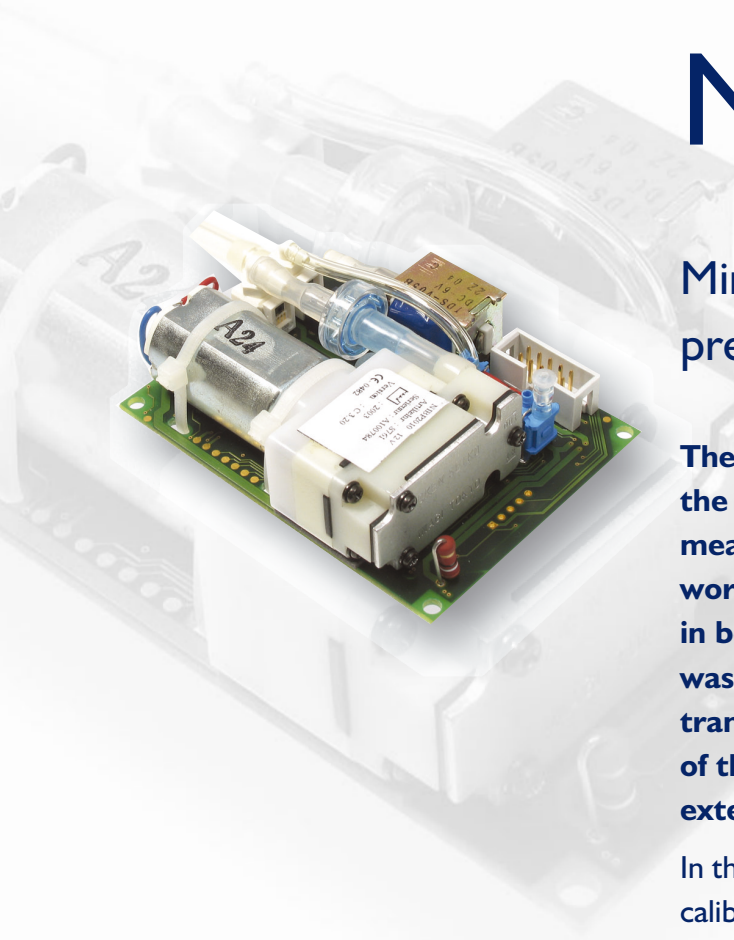
NiBP2010 5V

Miniature OEM module for blood pressure measurement

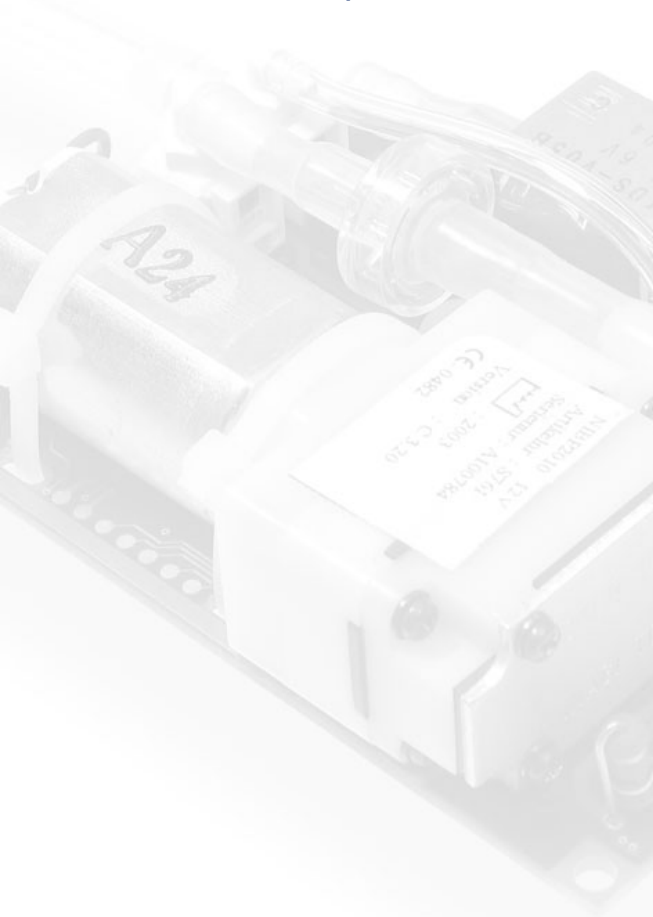
The NiBP2010 module is a miniature OEM module for the oscillometric and non-invasive blood pressure measurement ranging from neonatal babies to adults. It works very reliably with a high degree of patient safety in both modes. For this purpose, a double safety circuit was implemented for the pumps, valves and pressure transducers. The measuring accuracy and reproducibility of the measuring results is very good according to extensive clinical tests.

In the neonatal area, the agreement of the measuring results by calibrating with arterial comparative measurements (clinical testing at the Charité-Berlin) was very high. In the adult area, the precision was reached by means of a high number of test persons with comparative measurements (over 80 test persons, each with 6 measurements parallel to the sphygmomanometer evaluation). The long service life of the used valves and pumps was reached by using proven and tested components. Artifacts are already “detected” during measurement, which further validates the values.

We would be happy to demonstrate the system to you or adapt it to your needs.



Technical specifications



1. Functional description

- Non-invasive blood pressure measurement according to the oscillometric method
- Non-supervised continuous operation possible
- Artifact detection during measurement
- Serial interface for data exchange
- Minimized noise development

2. Technical data

- Supply voltage: +5 V DC (4.8 V DC to 7.0 V DC)
- Max. Current consumption: 750 mA (5 V DC)
- Dimensions: 80 x 60 x max 25 mm
- Interface: UART
- Adult measuring range:

pSYS	25 – 280 mmHg
pDIA	10 – 220 mmHg
pMAP	15 – 260 mmHg
- Child measuring range:

pSYS	20 – 150 mmHg
pDIA	5 – 110 mmHg
pMAP	10 – 130 mmHg
- Resolution: 1 mmHG
- Heart rate: 30 – 240 +/-2 bpm
- Measuring time: typically 20 s, max. for adults 90 s, max. for children 60 s
- Development kit available

3. Fulfilled standards and regulations

- EN 60601-1: Medical electrical equipment – Part 1: General requirements for basic safety and essential performance
- EN 60601-1-2: Medical electrical equipment – Part 1-2: General requirements for safety – Collateral standard: Electromagnetic compatibility – Requirements and tests
- EN 60601-2-30: Medical electrical equipment – Part 2-30: Particular requirements for the safety, including essential performance, of automatic cycling non-invasive blood pressure monitoring equipment
- EN 1060-1: Non-invasive sphygmomanometers – Part 1: General requirements
- EN 1060-3: Non-invasive sphygmomanometers – Part 3: Supplementary requirements for electro-mechanical blood pressure measuring systems

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Subject to design and equipment changes.