

# PowerCube-ROS

## Gentle measuring method with almost no impact on the respiratory system

Less is more:

Oscillation volumes of less than five millilitres make it unnecessary to support the cheeks for measurements with PowerCube-ROS, which is a must in standard impulse oscillometry.

Unlike conventional methods, the measurement has practically no impact on the bronchial system.

## Therefore, the gentle resistance measurement is ideal for paediatric patients!

In other areas too, where tests need to be taken that allow simple and quick measurements, with minimum equipment, the test is useful – especially when good patient cooperation cannot always be expected, e.g. in occupational medicine.

### Technical Data PowerCube-ROS

013370024 ROS box measuring module with swivel arm, table clamp, LF8 software program for Microsoft Windows® and accessories. For oscillatory resistance measurement programs ROS and ROS-nasal.

#### Options

The ROS box can be combined with almost any PowerCube or SpiroScout system and can be integrated in a full-fledged pulmonary function test laboratory!

014330011 Aerosol dosimeter ProvoJet 5

Other options on request

The software is network-compatible and can be linked with the office's patient management system via the GDT interface.

Active medical product, class IIa

RS 232 IR interface for 4-kV separation of measuring module and PC

Outer dimensions of the measuring module (D x W x H): 15 x 15 x 15 cm

Weight: approx. 2.4 kg

Power consumption 2A at 12 VDC

Resistance measurement principle: Oscillation (Siemens system)

Oscillation frequencies: 5, 10, 20 Hz

**Our products either meet or exceed the currently valid ATS/ERS Standards**

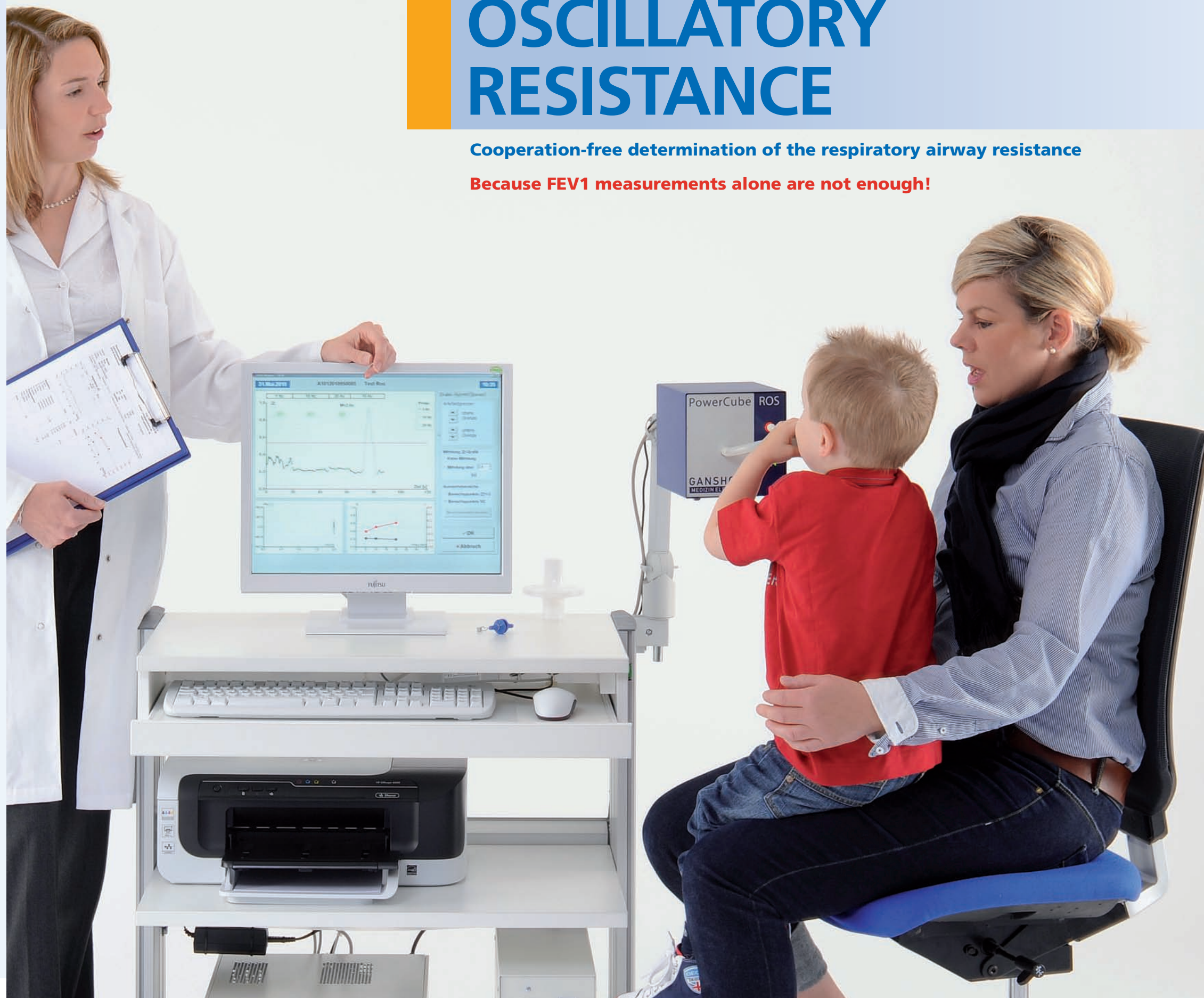
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# OSCILLATORY RESISTANCE

Cooperation-free determination of the respiratory airway resistance

**Because FEV1 measurements alone are not enough!**



we are certified by DIN EN ISO 13485:2012

CE 0123

Images do not necessarily show the standard version.  
Technical changes and improvements as well as the availability of the listed devices and options may be subject to changes. 09-10

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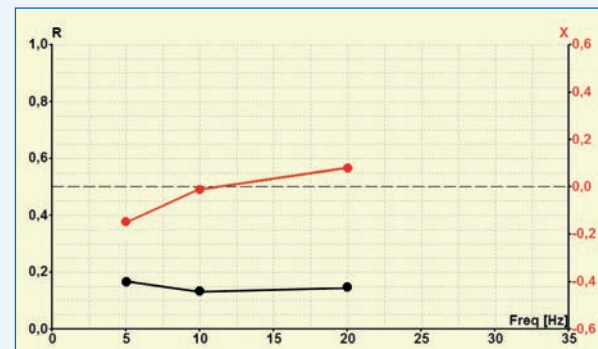
**Oscillatory resistance measurements instantly provide the answer to the essential question about the current degree of obstruction, practically without the patient's cooperation!**

Tidal breathing is enough to make measurements with the PowerCube-ROS. Therefore the PowerCube-ROS is the ideal screening tool. The big advantage: no more strenuous and error-prone cooperation-dependent breathing manoeuvres.

Even staff without special training in pulmonary function testing are able to perform accurate measurements quickly and efficiently.

Tests lasting a mere 10 seconds, as well as measurements during the patient's normal tidal breathing, without complicated manoeuvres, increase the patient throughput.

In provocation series or bronchodilation tests, inconsistencies that used to be caused by differences in patient cooperation or the patient adapting to the manoeuvres are a thing of the past.



In combination with a nasal mask, it is also possible to determine the nasal resistance.



## **GANSHORN PowerCube-ROS: proven technology for reproducible results**

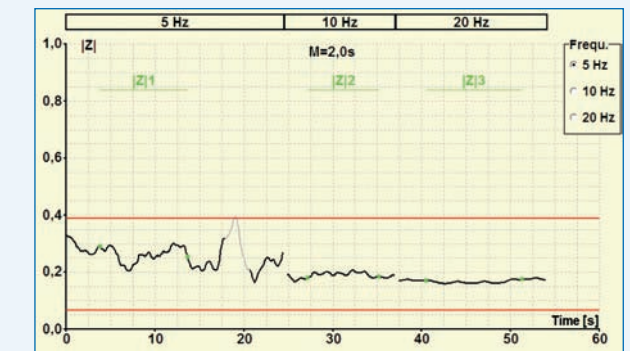
- The available frequencies of 5, 10, and 20 Hz are measured selectively and directly
- With the high temporal resolution of up to 60 measurements per second, the resistance curve can be viewed in real time with the highest precision
- The patient breathes through a reference tube, the defined resistance of which also serves to calibrate the system - an important contribution to measurement accuracy and quality assurance
- The reference resistance guarantees long-term stability and reproducible results: the basic parameters of mouth pressure and phase shift are calibrated simultaneously and matched
- Owing to the outstanding sensitivity of the device and the large-format diagrams, patient-induced artefacts immediately catch the reviewer's eye and can be excluded automatically or manually from the analysis

# ...gentle!

## **Save time and money in your daily routine**

Pulmonary function testing "made to measure" for determination of resistance, impedance, reactance, and phase angle as well as a wide choice of secondary parameters displayed on the monitor in real time.

- Cooperation-free examination of the bronchial system with respect to resistance, elasticity, and reactivity
- Information in the form of resistance-phase curves and phase response of the bronchial system relevant for differential diagnosis
- Pre/post comparisons and trending for therapy control, even for extended periods of time
- Clear and uniform screen layout, logical user guidance, and large operating controls for swift operation, optimise patient guidance and seamless work organisation



You can combine PowerCube-ROS with the SpiroScout system!