Fully integrated Dosimeter Module for easy and accurate bronchial provocation test protocols

- Controlled and more accurate management of bronchial challenge
- High quality DeVilbiss 646 Nebulizer
- Easy to clean and disinfect
- Multi-step protocol with a single drug concentration
- Choice between standard (ATS and Lofarma) or custom protocols
- Full compliance with ATS/ERS Guidelines

Bronchial challenges can be used to confirm or rule out a diagnosis of hyperreactive airways. A dosimeter is particularly useful as it allows to perform and control automatically the different steps of the bronchial challenge and the accurate delivery of incremental doses of bronchial stimulants.

The testing procedure involves executing repeated FVC manoeuvres following the inhalation of pharmacologic agents according to an established protocol.

The dosimeter consists of an ampulla (to fill up with drug before test starts) connected to a flowmeter monitoring the ventilation and the amount of drug inhaled, then a cylinder of medical air is used for the nebulization of the medicine.

A pressure transducer is set to monitor the pressure at the ampulla level, during every single dose delivery, and guarantee that the correct amount of drug is delivered or stop the delivery.

The OMNIA software automatically controls the dosimeter according to a pre-defined Bronco challenge protocol.

An easy-to-use protocol editor in OMNIA software allows to select protocols among a predefined list or to create new ones.
Technical Specification

**Nebulizer**
- **Type**: DeVilbiss 646
- **Nebulizer @37 PSI**: 0.9 ml/min
- **Nebulizing material**: Lexan
- **Ampulla volume**: 5cc
- **Safety tools**: Si (2 electro-valves connected in series)
- **Power**: 100-240 Vac +/-10%, 50-60Hz

**Pressure transducer**
- **Type**: Piezo-resistive compensated in temperature
- **Range**: 3 – 58 PSI
- **Accuracy**: +/-1.5%Vfs

**Standard Packaging includes:**
- Dosimeter Kit, Dosimeter Tube, Nebulizers Holder, Dosimeter Adapters (2 pcs), Flowsafe-antibacterial filter adapter (2 pcs), DeVilbiss 646 Nebulizer (3 pcs), Mouthpieces (10 pcs), Bacterial Filters (10 pcs)

**References**