

**EXPERT DIAGNOSTIC SYSTEM FOR MONITORING OF HUMAN BREATHING  
PRODUCED BY UE UNITEHPROM BSU**

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Unitehprom BSU Unitary enterprise (UE) is a developer and producer of a multifunctional automated spirometer MAS.

Spirometer MAS is an autonomous medical diagnostic device which facilitates the screening or more profound examinations of the respiratory system as well as the determination of more than 40 parameters of the pulmonary system.

Each MAS spirometer is equipped with a Child Monitor statistical data processing program, which is designed for determining the growth retardation in children (forced expiratory volume-1 and lung capacity analysis) and may be especially useful when monitoring people suffering from bronchial asthma. The examination protocol always contains the information on the respiratory function (RF) at the date of examination and the estimation of the dynamics of RF parameters for the whole period of the patient monitoring.

The standard software also includes animated instructions which help children conduct breathing tests properly and reveal additional spirometry possibilities for people with reduced hearing.

Our equipment facilitates the conduction and automated interpretation of bronchodilatory tests accounting for the reversibility of the broncho-obstructive syndrome and determining the severity of COLD (chronic obstructive lung disease) as well as the conduction and automated interpretation of pharmacological provocation tests for the purpose of determining the hyper-reactivity of respiratory tract.

Asthma-monitor program is used for daily monitoring of the exhalation peak rate of the volume flow (PEF) and of forced expiratory volume-1 (FEV1) in children with asthma (the program is used in hospitals).

The examination protocols of breathing function facilitate the interpretation of the results “at a glance”, meaning that the interpretation does not require the analysis of numerical values of the measured parameters, which makes it possible for general practitioners to conduct the screening estimation of spiograms during large-scale examinations. Moreover, MAS spirometer calculates and prints the quality and confidence criteria of spirometric tests within printed examination protocol, which are recommended by ATS/ERS-2005.

MAS spirometers are quite efficient, since they may be used together with antibacterial filters as well as reusable and single-use materials without the loss of the precision and accuracy of the spirometrical test data.

The equipment complies with the safety requirements of the European Union for medical equipment: EC certificate No.10 0456 QS/NB issued on May 28, 2010

The quality management system is certified under ISO13485:2003, certificate No. 10.252.026 issued on March 18, 2010

The spirometer is registered in the Republic of Belarus: registration certificate ИМ-7.4473/1003

The certificate of compliance of the Republic of Belarus No. BY/112 03.03.048 00032

The spirometer is registered in the Russian Federation: registration certificate No. 2006/2058 issued on December 19, 2006