



**Belarusian State University
of Informatics and Radioelectronics**
R&D Department

Announcement

«China International Import Expo» exhibition

November 5 – 10, 2022
Shanghai, China
National Exhibition and Convention Center (NECC)

About the exhibition

The exhibition is dedicated to the implementation of the foreign high-tech technology and products that are imported to China. The accent of the exhibition is put on high-tech production equipment and new production areas of strategic importance. The goal is to increase the effectiveness of Chinese organizations.

Thematic sections of the exhibition:

- automotive industry;
- high-tech equipment and information technologies;
- medical equipment and medicine;
- consumer products;
- trade-in services;
- food and agricultural products.

The event is sponsored by the Ministry of Commerce of the People's Republic of China and Shanghai Municipal People's Government under the aegis of the World Trade Organization and the United Nations Industrial Development Organization.

At the exhibition BSUIR will demonstrate high-tech innovations in the field of microwave technology.

Meters of complex reflection and transmission coefficients (vector and scalar network analyzers)

The meters are designed for automatic measurement of complex reflection and transmission coefficients (S_{11} and S_{21}) of waveguide devices, as well as for technical maintenance and repair of communication systems and replacement of the outdated material and technical base of the telecommunication industry.

Application areas:

- infocommunication;
- electronics and microelectronics;
- radar, radio navigation, communication

Advantages:

- metrological support of equipment design and manufacturing stages;
- remote calibration;
- modification of metrological characteristics in accordance with the specific production conditions and customer's demands;
- can be integrated into the measuring system via standard computer interface Ethernet.

To ensure competitiveness, it is possible to increase or decrease the number of modulation types due to replaceable blocks, which makes it possible to reduce the cost of devices.

The devices are included in the Belarusian and Russian Registers of Measuring Instruments.

Microwave power meters, calorimeters

The devices are designed to measure the power of sinusoidal microwave signals and the average power value of pulse-modulated microwave signals in coaxial and waveguide paths.

Application areas:

- measurement of the output power of generators and other sources of microwave signals;
- attenuation measurement in two-pole networks;
- measurement of the radiation level using calibration antennas.

Advantages:

- highly-precise measurement;
- digital indication in μW , mW , dBm , dB ;
- manual / semiautomatic / remote operation.

Low-altitude radio altimeter for unmanned aerial vehicles

The equipment is designed to measure the altitude of an unmanned aerial vehicle with high precision in real time. The modern element base was used in order to construct the altimeter, which allowed to ensure high rate of information update, minimal dimensions and weight.

Advantages:

- millimeter wavelengths range;
- high precision of altitude measurement (1 % error);
- wide measuring range (from 0 m);
- high rate of information update;

- ability to operate on high speed objects;
- modern element base;
- ability to operate in any weather conditions.

Developer: MWMLab – Research, Industrial, and Training Innovation Center of Microwave Technologies and Metrology Support.