



**Belarusian State University
of Informatics and Radioelectronics**

R&D Department

Announcement

Exhibition “Smart Industry Expo” in the framework of III Interregional specialized forum on digital transformation of the real sector of the economy

September 20 - 22, 2022

Minsk, Belarus.

20/2 Pobediteley av., Roofed Soccer Arena

About the exhibition:

The exhibition will be held for the third time and will traditionally bring together consumers and suppliers of digital technologies and solutions focused on the formation of the smart industry, the development of smart industries and the digital transformation of enterprises.

Technologies

- Digital design and simulation
- Additive and hybrid technologies
- Big Data, AI, IIoT
- Industrial robots
- Sensorics
- Enterprise management systems (MES, ICS, ERP, CRM, SCM, PLM)
- Robotic Business Process Automation (RPA)
- Augmented Reality (AR/VR/MR)
- Cloud Solutions
- Blockchain

Directions and industries:

- Mechanical engineering
- Energy
- Chemistry and oil and gas industry
- Pharmacy
- Agriculture
- Food
- Logistics
- Smart City

BSUIR will showcase high-tech developments

Components of remote monitoring systems

The University offers the development and production of devices that allow remote monitoring of the parameters of a moving vehicle in real time:

- fuel level, temperature, pressure, density sensors;
- differential-type fuel flow meter;
- coupling device and adder for the fuel level sensor;
- two-channel vibrorelay;
- data display module.

The components of the remote monitoring system have been successfully implemented on mass-produced products of enterprises.

The following developments would also be introduced at the exhibition:

- universal service adapter designed to connect devices with the interfaces such as: RS-232, RS-485, TTL UART to a PC. The purpose is to measure the frequency and voltage signals of connected devices; and to generate a special "Calibration" signal (for calibrating fuel level sensors);
- calibrator, it ensures frequency, analog, and interface fuel level sensors calibration with RS 232/485 interfaces when mounted on a vehicle without connecting to a PC.

Pipe Fault Controller

The controller is designed to measure the resistance, control the pipe condition in polyurethane foam insulation and predict emergencies based on the dynamics of changes in the pipe insulation resistance. It is used in automatic pipe condition monitoring systems. Comes with an in-built GSM module.

Advantages:

- measured values are indicated directly on the controller;
- transmission of the measured parameters via the GPRS channel (virtual COM port, MODBUS protocol) to the control center of urban heating networks;
- transmission of discrete open/close signals to cabinet (facility) doors via GPRS channel;
- supports the in-built web-server for quick control and diagnostics of the device.

About the developer