

Instruments for Electrical Power Industry Meter and Transformer Test Systems

#### **About Us**

Since 1991 Mars-Energo designs and manufactures highly specialized instruments and systems for testing and calibration of electrical energy meters and instrument transformers. Our solutions are widely used by meter and transformer test laboratories, utilities, industries, meter and transformer manufacturers.



### Cooperation

In cooperation with the D.I. Mendeleyev Institute for Metrology (VNIIM) and All-Russian Research Institute of Metrological Service (VNIIMS), our company is working on the development of reference instruments for accuracy testing of measurement equipment within digital substations and smart grids. Another area of our collaboration covers development of the system of national reference standards.



## **Metrological Laboratory**

Mars-Energo has its own accredited metrological laboratory where, among the equipment at our disposal, there are the Power Calibration system (expanded uncertainty of AC active/reactive power measurements =  $\pm 0.004\%$ ) and the High-Voltage Reference System of voltage scaling factor. All measurement instruments manufactured at our factory are tested here.

Learn more



### **Products**

Our product range includes:

- Test systems and reference meters for testing of electrical energy meters and instrument transformers. The types of tested transformers are: conventional analogue CTs and VTs, electronic transformers (ECTs and EVTs) and current/voltage transformers with IEC 61850 digital outputs
- Reference equipment for digital substations.



### **Innovative Products**

Mars-Energo offers meters for DC energy monitoring in electric railway networks and systems for testing, calibration and maintenance of equipment at electric vehicle charging points.



# Solutions for IEC 61850 Digital Substations

Ministry of Energy of the Russian Federation and the Board of Directors of Rosseti get much interested in the following instruments manufactured by Mars-Energo:

- Reference instrument of new generation Energomonitor-61850
- Calibrator of 61850-9-2LE data streams MarsGen-61850
- Mobile multifunctional reference setup MarsTest-61850
- High-voltage metrological mobile lab ME-DSS.



# **Energy of White Nights**

In collaboration with the Federal Agency on Technical Regulation and Metrology (Rosstandart), Mars-Energo regularly holds the All-Russian Scientific and Technical Conference "Energy of White Nights". The conference traditionally focuses on the following areas: metrology, measurements of electrical signals, energy management and power quality assessment.



# **Training Center**

At Mars-Energo training center we conduct training courses on the following topics:

- Calibration of electrical energy meters, instrument transformers and other measuring instruments
- Energy audit and power quality analysis of electrical systems
- Metrological support of measuring instruments in digital substations.

Online training is now also available.

Learn more



### **Global Contacts**

Mars-Energo regularly takes part in international exhibitions.

We have representatives in the European Union, United Arab Emirates, India, and Vietnam.

More than 6000 systems and instruments produced by Mars-Energo operate in about 20 countries all over the world.





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