EMC MOBILE INSTRUMENTATION SYSTEM FOR INDUSTRIAL APPLICATIONS



The Krylov State Research Centre has developed a mobile instrumentation system for measuring the electromagnetic compatibility (EMC) parameters of full-scale electronic & electric systems on industrial sites and transport vehicles, as well as test benches of equipment manufacturers. EMC tests can be performed in parallel with the trials of the main equipment functions.

This mobile system integrates the unique in-house methods with the state-of-the-art hardware offered by the world's leading instrumentation manufacturers to enable all types of EMC tests on radio-electronic systems and their individual components, as well as to assess the electromagnetic operating environment.

The mobile instrumentation system consists of 17 special-purpose units and can be readily configured to suit the specific types of tests and hardware to be tested. The system's instrumentation is able to measure the electromagnetic fields, currents and voltages causing interferences with a wide frequency range from zero Herz to tens of GHz, also short-term transient interferences of several nanoseconds can be captured and measured. On-line data logging and processing is provided covering the entire range of EMC/EMI parameters.

The mobile instrumentation system can also be used to ensure efficient protection of people from harmful electromagnetic emissions related to industrial and social infrastructure.

