

Diagnostic complex for monitoring dynamic parameters of traction vehicles comprises measurement sensors, a data collection and synchronization system, and software for filtering and analyzing experimental research results. Wherein the diagnostic complex additionally comprises a coherent true speed radar configured according to a homodyne circuit with a capability of changing an inclination angle of a transmitting antenna for measuring a true speed of movement, and a propulsion unit rotation sensor based on the Hall effect, mounted on a propulsion unit of the traction vehicle by means of a unified mounting system on neodymium magnets. The diagnostic complex comprises a software signal filtering system with a specified sensitivity that complements filters built into the measurement sensors, and software configured with a capability of comparing operating modes according to energy saving criteria and dynamic operating parameters.