

Design of a DC motor speed controller with computer connection via RS485 standard

Nguyen Thi Kim Anh

Abstract: The study proposes the design of a speed control system for a DC motor, integrating an RS485 communication port for data exchange with a computer. The rationale for choosing this topic is based on the high demand in industrial applications for optimizing performance and reducing energy consumption. The objective is to build a system capable of precise control, meeting requirements for fast response and stability. The research methodology includes theoretical evaluation and experimental implementation to ensure effectiveness. The significance of the topic lies in its contribution to the development of electric motor control technology and support for automation processes in industries.

Keywords: DC motor, RS485, Integrated computer