

Design of monitoring and control system for PLC and inverter network connection

Nong Hoang Trinh

Abstract: This topic focuses on designing and implementing a network connection monitoring and control system for PLC (Programmable Logic Controller) and inverter devices. The context for selecting this topic is driven by the need to optimize operational performance in the automation industry, aiming to address the issue of synchronized management between devices over a network. The objective is to build a comprehensive monitoring system that integrates modern communication protocols to enhance the flexibility and reliability of the control system. The research methodology includes both theoretical study of PLC and inverter technology, as well as experimental application deployment on a real network platform. The significance of this topic lies in its contribution to the development of automation technology, while also providing a feasible solution for industrial enterprises seeking to improve operational performance and management.

Keywords: PLC, inverter, network monitoring, automation, experimental control