Abstract

This paper describes the necessity of "Integrated Monitoring of Encoder status parameters and GUI based Remote Control Panel using LabVIEW" application, which is the implementation of serial and Ethernet data transmission using LabVIEW. Remote Control Panel (RCP) is an electronic instrument from which specified commands can be given to Encoders. The RCP is generally connected to the command Encoders through serial links (RS 232, RS 422). After getting the commands from RCP, the commands are generated at Encoders and are transmitted followed by different processing. In the hardware based RCP system, some faults are observed at RCP and the facility to monitor the Encoders status parameters at RCP is not present. To overcome these bottlenecks, a Personal Computer (PC) based integrated RCP system was visualized and developed based on LabVIEW. LabVIEW was used for better GUI interface and reduction of development time. This system takes Encoder status parameters from Encoder change over unit through Ethernet link and is serially connected to the Encoders to gives commands to it. Hence all the status parameters of Encoders are monitored as well as appropriate commands can be given to the Encoders through this application.
References

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- Sun Jian; Lu Peng; Fu Yaqiong; Liu Ruixiang; Chen Le, "The Implementation and Application of Programming Port Communication between Industry PC and Mitsubishi FX Series PLC", 3rd International Conference Intelligent System and Knowledge Engineering-2008 (ISKE 2008), Volume: 1, PP 1324 – 1327.

Index Terms

Computer Science
Telecommunications

Keywords
Labview  Serial Data Transmission  Ethernet Data Transmission