
Data Communication between Monitor computer and PLC Based on the Profibus

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ABSTRACT

In networked control system (for short, it's called NCS) the detectors, controllers, monitor computers, servers, human-machine interfaces (for short, it's called HMI) and etc. are all usually distributed, the communications in them are needed in some way. The data communication in real-time and reliability is most important technology in NCS. Geotextiles-Laying Vesse NCS introduced in the paper consists of Siemens s7-300 series Programming Logic Control (for short, it's called PLC) and industrial computer mainly. The hardware configuration and Profibus-DP communication technology are discussed. The DLL files provided by Siemens PRODAVE software are analyzed and used to realize communication between PLC and monitoring computer. The communication program in Visual Basic and Visual C programming language is presented. The communication way is successful used in Geotextiles-Laying Vesse The result shows that data communication's error code rate is lower and communication rate is higher.

Keywords: Network; Fieldbus; Communication; Programming Logical Controller.
