

SHELTERED DISTRIBUTED MULTI-SENSOR DATA ACQUISITION SYSTEM

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ABSTRACT

In this Modern era, the requirement for a flexible data acquisition system is increasing in all the fields of industry as well as scientific research. Collection of data, processing the data, secure transferring of the data, controlling the field parameters etc are the primary requirement of the system. This project aims to describe a secure - low cost - distributed data collection and control system based on Embedded Ethernet. The sensed and measured data at the remote location can be accessed through the network. The control PC can process the information and the control signal will be transmitted back to the field through the same wireless Ethernet. So here the microcontroller is enabled to communicate through a data communication network. This will provide greater flexibility to the embedded system and will enhance its usage in more applications. This project can be considered as a perfect blend of two major arenas- Embedded Systems and Data Communication Networking

KEYWORDS: Data Acquisition, Embedded Ethernet, Data Encryption, Sensor Modules