

AUTOMATIC DATA LOGGER

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ABSTRACT

Data logger is a well known device which used to record and display data in the form of digitalized value, whereby PC is subjected in this manner. From the sending and receiving of the device is mechanically designed to transmit wirelessly without a single line of wire sighted. This is because of the usage of the device in remote places, where to establish a line for the device is barely possible.

From picking up data of the analogue sensor, converting it to digital, sending through wireless, receiving at the other side of the receiver and finally connecting through parallel port to the PC, the data logger has it is weaknesses that it needs plenty of attention to the conversion part inputted into the software coding. Derived formulae and decimal to binary conversion is basically based on the estimation method done to be able to produce that particular result.

Based on the database stored, graph report will be produced which will predict a precise overview and analytical mind of the entire subject. Temperature, humidity and rainfall is basically what is going to be implemented in this logger and the specification is no more less than a supply of 5.0 voltage to the both receiver and transmitter device. In conjunction with that, the data is arranged that it will be sent in a 4bit sequential movement through the Radio frequency and rearrange back to the following order from the least significant to the most significant bit.

Problems faced during sending and receiving is at the point of the wireless radio frequency being obstructed with a high insulator, distanced gap and similar frequency reuse. Usage of the battery has its life span and modification in the future will be a wise idea if a relay is to be added in that particular column, where it will trigger a turned off sequence after a signal of data is being sent to the programmable integrated chip, family number 16F877A.

Lastly, modification of the casing of the device is essential, so that it will protect the device from short circuit and wild beast if it were to be placed in a forest.