Abstract

A World without electronic is just likes human body without soul. Electronics plays very important role in human life. We are surrounded by electronic devices such mobile phone, television, computer etc. Power line communication (PLC) is a best electronic mean for data transmission. Using power line communication remote meter reading, power supply control and Electricity theft detection can be possible. This meter is called as smart because it transmit energy consumption units automatically through existing power lines and calculate bill amount. In this detection system, separate energy meter is used which is located at distribution pole stores the value of energy consumed by all subscriber at that connection point. The stored energy value is compared with the total value at main energy meter situated at individual subscriber’s premises. In case of any difference between two recorded energy values, an error signal is generated. The architecture of the system is presented. In this paper, the above said process is totally automatic and the communication is made possible entirely through the power line.
Electronic Solution for Smart Electric Metering over Power Line

References


Index Terms

Computer Science

Circuits and Systems

Keywords

Illegal electricity usage detection; power line communication; power line communication (PLC) modem; power supply control; Remote meter reading.