Abstract

This paper presents a Power Control T-MAC protocol that combines the features from S-MAC and T-MAC protocols for Wireless Sensor Networks (WSN). This protocol has been proposed to reduce the energy consumption of a node. In WSN a node consumes energy in transmitting and receiving of data, listening transmissions of other nodes, and in sleep mode. Therefore, energy consumption of a node has been estimated by adding up the energy consumed in each of the above activity. This has been achieved by estimating the time spent in each activity by a node. The proposed protocol has been simulated using NS-2. The simulation results of Power Control T-MAC shows better energy savings as compared to T-MAC and S-MAC protocol.

Reference
An Analytical Model for Power Control T-MAC Protocol

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Index Terms

Computer Science  Neural Computation
Key words

Wireless Sensor Networks  T-MAC  S-MAC

Power control

Poisson distribution