Abstract

Wireless sensor networks or can be called WSN (wireless sensor network) is an infrastructure comprised of sensing (measuring), computing and communication elements that gives administrators the ability to observe and react to events and phenomena in a given environment [1]. Research by the author discusses the application of wireless sensor network architecture on the sensor node by way of sensing data using sensor nodes and sends data to the sink node and see the impact of the network architecture to the battery life of the sensor node. Doing this research, the author hopes to make the design of sensor network architecture for sensor network nodes and compare the battery life of the sensor node when performing data retrieval and delivery to the sink node to the network architecture specified. Based on the test gained an average of 0.58 Wh battery endurance of up to 2.05 Wh. Testing is done with the author by focusing on battery life time sensor data acquisition of sensor nodes and towards the sink node for any network architecture.

Keywords: wsn, sensor node, sink node, battery power