

# An Efficient Multi-Protocol Gateway System Design on the Zigbee

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**Abstract—** In this paper we propose the multi-protocol gateway system on intelligent zigbee. The proposed multi-protocol gateway system was designed that the gateway divided to independent into CPU board and base board for gather information for streetlight power control and environmental monitoring and verify the on-site situation and control as real time using the wired and wireless networks. The proposed multi-protocol gateway, the system's power, impact, continuous operation, the voltage stability test results, it were obtained reliable monitoring results with success rate of normal operation of over the 95%.

**Keyword—** Zigbee, Multi-protocol, Gateway, Interface, Multi sensor



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