# An Embedded System for Early Detection of Gas Leakage in Hospitals and Industries

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**Abstract :** Leakage of gases in a system makes infrastructures and users vulnerable; it can occur due to its environmental conditions or old groundwork. In hospitals and industries, it is very important to detect any small level of gas leakage because of their sensitivity. In this research, a portable detection system for the small leakage of gases has been developed, gas sensor (MQ-2) is used to find leakage when it's at its initial phase. The sensor and transmitting module senses the change in level of gas by using a sensing circuit. When a concentration of gas reach at a specified threshold level, it will activate an alarm and send the alarming situation notification to receiver through GSM module. The proposed system works well in hospitals, home, and industries.