

**UNIVERSITI TEKNOLOGI MARA**

**IOT BASED REMOTE MONITORING  
GAS LEAKAGE IN FACTORY  
ALARM SYSTEM**

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## **ABSTRACT**

Burnt factory has become a big issue, which need to be dealt with. Now in malaysia, monitoring of factories is done by physically check by someone that have sent by management to check all problem. This is a discrete, time consuming process and an inefficient way. In order to automate this process, we are going to to monitor the factories remotely. This is done with the help of sensors, transmitter-receiver and microcontroller. These sensors are deployed in factories which connect to microcontroller. The data that collect by sensors that sent to transmitter-receiver.

# TABLE OF CONTENTS

<b>CONTENTS</b>	<b>PAGE</b>
<b>SUPERVISOR'S APPROVAL</b>	i
<b>DECLARATION</b>	ii
<b>ACKNOWLEDGEMENT</b>	iii
<b>ABSTRACT</b>	iv
<b>TABLE OF CONTENTS</b>	v
<b>LIST OF FIGURES</b>	ix
<b>LIST OF TABLES</b>	xi
<b>CHAPTER 1 : INTRODUCTION</b>	
1.1. Background Study	1
1.2. Problem Statement	2
1.3. Project Aim and Objective	2
1.4. Scope of Project	2
1.5. Significant of Project	3
<b>CHAPTER 2 : LITERATURE REVIEW</b>	
2.1. Introduction	4
2.2. Monitoring Industries System	4
2.2.1 Alarm System	4
2.2.2 Gas leak System	6
2.2.3 Motion Detector System	7
2.2.4 Humidity Sensor System	9
2.3. Internet of Things (IoT)	11
2.3.1 Introduction	11
2.3.2 Implementation of IoT	12
2.3.3 Applications of The Internet of Things	13

# CHAPTER 1

## INTRODUCTION

### 1.1 BACKGROUND STUDY

A monitoring system is an electrical device that sets off an alarm when someone tries to break in. Monitoring systems/alarms are used in residential, commercial, industrial, and military properties for protection against burglary (theft) or property damage, as well as personal protection against intruders. Car alarms likewise protect vehicles and their contents. Prisons also use security systems for control of inmates. Some alarm systems serve a single purpose of burglary protection; combination systems provide both fire and intrusion protection. Intrusion alarm systems may also be combined with closed-circuit television surveillance systems to automatically record the activities of intruders, and may interface to access control systems for electrically locked doors. Systems range from small, self-contained noisemakers, to complicated, multi-area systems with computer monitoring and control. It may even include two-way voice which allows communication between the panel and monitoring station.

As one of the main problems is monitoring their industry from intruder, damage of property and life risk when got fire causes of gas leak. These IOT Based Remote Monitoring Gas Leakage In Factory Alarm System have features like detect the gas leak, motion and temperature so the owner can monitor remotely their own industry. With these IOT Based Remote Monitoring Gas Leakage In Factory Alarm System being installed or added to the owner's property, this could help reduce the damage property and burnt factories.

With this kind of technology, the owner will have an all-in-one with it has its own security system that can be controlled with an application or program downloadable in smart phones that can only be used by its owner.

We have chosen this as our topic in this research because we students would one day become a manager of industry that should not worry about that kind of problem because we have the IOT Based Remote Monitoring Gas Leakage In Factory Alarm System that could help on the situation.