**INDUSTRIAL SECURITY SYSTEM**

**DESCRIPTION:**

Security is primary concern for everyone. There are many ways to provide security at homes or in industries. This Project describes a design of effective security alarm system that can monitor an industry by using various sensors for communication.

The project is designed and implemented in such a way that we interface various sensors such as smoke, fire and IR sensors to the microcontroller. The microcontroller continuously checks the status of the sensors. If anyone of the sensor activated by person or by fire or by smoke it displays the status data on the LCD and a buzzer interfaces to the controller serves the purpose of the alarm. So the people can alert by warning and can take further action.

This project uses regulated 5V, 500mA power supply. 7805 three terminal voltage regulator is used for voltage regulation. Full wave bridge rectifier is used to rectify the ac output of secondary of 230/12V step down transformer.

# TECHNICAL SPECIFICATIONS:

**HARDWARE:**

Micro controller : AT89x series

Crystal : 11.0592 MHz

LCD : HD44780

FIRE Sensor

SMOKE Sensor

IR sensor

Buzzer

**POWER SUPPLY**

Transformer : 12V step down

Filter : 1000uf/25V

Voltage Regulator : 7805, 7812

**SOFTWARE:**

Keil IDE

UC flash

Proteus

**APPLICATIONS**

* Industrial applications
* Household applications

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**BLOCK DIAGRAM:**

Power Supply

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FIRE

SENSOR

16X2LCD

IR

SENSOR

SMOKE

SENSOR

BUZZER

**POWER SUPPLY BLOCKDIAGRAM:**

Step down Transformer

Filter

Regulator

Output

Bridge Rectifier