

PROJECT OBJECTIVES :

TEAM ID	PNT2022TMID10108
PROJECT NAME	Industry-specific intelligent fire management system

Fire alarm systems are essential in alerting people before fire on their industries. However, fire alarm systems, today, require a lot of wiring and labor to be installed. This discourages users from installing them in their homes. Therefore, we are proposing an IOT based wireless fire alarm system that is easy to install. The proposed system is an ad-hoc network that consists of several nodes distributed over the house. Each of these nodes consists of a microcontroller (ESP8266 node MCU) connected to smoke, temperature, humidity, flame, Methane and Carbon Monoxide (CO) sensors that continuously sense the surrounding environment to detect the presence of fire. Fire and smoke kill more people every year than many other forces. While controlled fire serves us in so many instances, uncontrolled fire can be of harm , however, the rapid detection of fire and its control can save lives and 5 property damage worth millions. Conventional and addressable are two main types of fire alarm systems, but unfortunately, these fire alarm systems often generate false alarms. So, there is a need for a cost-effective multi-sensors expert alarm system that is artificially trained and assists FDWS (fire detection and warning system) to make the right decisions and to reduce the number of false alarms.