

Project Design Phase-I Proposed Solution Template

Date	20 October 2022
Team ID	PNT2022TMID10277
Project Name	Project - Industry-specific intelligent fire management system
Maximum Marks	2 Marks

Proposed Solution Template:

Project team shall fill the following information in proposed solution template.

S.No.	Parameter	Description
1.	Problem Statement (Problem to be solved)	The primary purpose of fire alarm system is to provide an early warning of fire so that people can be evacuated & immediate action can be taken to stop or eliminate of the fire effect as soon as possible. Alarm can be triggered by using detectors or by manual call point (Remotely). To alert/evacuate the occupants siren are used.
2.	Idea / Solution description	<ul style="list-style-type: none"> Fire alarm systems are only effective if they can generate reliable and fast fire alerts with exact location of fire. Based on timely taken analysis we can find the nature of water . As the time of intervention decreases, the damage also decreases. Hence the most important factor in a fire alarm system is the reaction or response time of fire alarm system, that is, the time between fire detection and extinguishing.
3.	Novelty / Uniqueness	Addressable technology provides increased reliability. Using short circuit isolation it is possible to isolate a short circuit in the loop, minimising the effects of a fault. The addressable FC501 panel can be remotely controlled and monitored via IP.
4.	Social Impact / Customer Satisfaction	<ul style="list-style-type: none"> Fire detection systems increase response times, as they are able to alert the correct people in order to extinguish the fire. This thus reduces the amount of damage to the property. Fire detection systems can be connected to sprinklers that will automatically respond when a fire is detected..
5.	Business Model (Revenue Model)	Otherwise known as addressable fire alarms, intelligent control systems are more sophisticated than conventional fire alarm systems and are able to provide an exact location of the event. These systems can range from simple using only one device to extremely complex housing several hundred devices.
6.	Scalability of the Solution	Contemporary fire alarm systems use automatic functions to detect the occurrence of an event that may result in a fire. They receive a signal from a fire sensor (smoke, heat or carbon monoxide detector) and automatically transmit it to the fire alarm panel