Proposal

AC FAILURE, SMOKE DETECTION AND OVER TEMPERATURE ALARM SYSTEM

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A. AC FAILURE, SMOKE DETECTION AND OVER TEMPERATURE ALARM SYSTEM

1. General Features

- Micro-controller based digital embedded system.
- Input power: AC220V, 50/60Hz
- High quality and highly luminous LCD type display is used for displaying all the details about system.
- Loud electric siren is used for alerting.
- Designed to use for indoor only.
- High quality AC line detection/ failure circuitry is used.
- Own battery backup and charging unit.

2. Cost Estimation

AC DETECTION/ FAILURE ALARMING SYSTEM					
S.N.	**Material**	**Piece**	**Price/Pieces**	**Total**	**Description**
1	AC phase detection circuits	3	2375	7125	High accurate AC phase detection for AC(110-220V) @ 50-60Hz
5	Display Screen I2C interface	1	1275	1275	High luminious LCD type display with I2C interface
6	Microcontroller Board	1	2650	2650	Main control board
7	Battery & Charger	1	2200	2200	12V Battery and charger
8	Automatic Battery Charger Unit	1	1375	1375	Automatic Battery charger
9	High efficient voltage regulator and switching circuits	1	1650	1650	For uninterruptable power supply for all parts bestly designed voltage regulator circuits
10	Mountable Siren	2	1350	2700	12V DC siren
11	Mounting & Box	1	1375	1375	IP67 Box
14	Development Cost	1	12500	12500	
#	Total			32850	

* Note: all the numeric values defined in above Cost Information table are in Nepalese ruppes

B. REAL-TIME MONITORING AC FAILURE, SMOKE DETECTION AND OVER TEMPERATURE ALARM SYSTEM

1. General Features

- Micro-controller based digital embedded system.
- High quality K-type thermocouple based temperature monitoring system.
- MQ-2 Smoke sensor Module is used for detecting any flammable condition.
- Input power: AC220V, 50/60Hz
- High quality and highly luminous LCD type display is used for displaying all the details about system.
- The whole status of the systems can be monitored and controlled from any desktop, laptop or smart phone connected to the same network. i.e. Smoke status, temperature status, AC phase online/offline status.
- Loud electric siren is used for alerting.

- Designed to use for indoor only.
- High quality AC line detection circuitry is used.
- Own battery backup and charging unit.

2. Cost Estimation

AC FAILURE, SMOKE DETECTION AND OVER TEMPERATURE ALARM SYSTEM WITH REALTIME MONITORING					
S.N.	**Material**	**Piece**	**Price/Pieces**	**Total**	**Description**
1	AC phase detection circuits	3	2375	7125	High accurate AC phase detection for AC(110-220V) @ 50-60Hz
2	Thermocouple Temperature sensor	1	1350	1350	K-type thermocouple Best for the sensitive places(-200'C to 1250'C
3	Thermocouple Temperature sensor Amplifier Circuits	1	2650	2650	For accurate data
4	Smoke Sensor & Signal Amplifier	1	3700	3700	High sensitive smoke detecting sensor
5	Display Screen I2C interface	1	1275	1275	High luminious LCD type display with I2C interface
6	Microcontroller Board	1	2650	2650	Main control board
7	Battery & Charger	1	2200	2200	12V Battery and charger
8	Automatic Battery Charger Unit	1	1375	1375	Automatic Battery charger
9	High efficient voltage regulator and switching circuits	1	1650	1650	For uninterruptable power supply for all parts bestly designed voltage regulator circuits
10	Mountable Siren	1	1350	1350	12V DC siren
11	Mounting & Box	1	1375	1375	IP67 Box
12	Real time monitoring	1	4550	4550	Microcontroller with builtin module
13	Web application development	1	9500	9500	For monitoring status from desktop or smart phone connected on same network
14	Development Cost	1	12500	12500	
#	Total			53250	

* Note: all the numeric values defined in above Cost Information table are in Nepalese ruppes

Support and Services

Half year free service will be provided from the date of installation. Developer's party shall not be responsible for malfunctioning components.

** all the amount defined are excluding VAT