

FIRE ALARM SYSTEMS

 MODEL E 21M

INTRODUCTION:

This fire alarm and security system is exclusively designed to meet the Safety requirements and to protect the unmanned equipment rooms, Microwave stations, exchanges etc. from unpredictable events such as fire, unauthorized intrusion, robbery etc. Control panel E 21M comprises three independent sections which continuously monitor the protected premises and generates the corresponding alarm if any of the above condition persists within the premises.

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Special tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C MAINS FAIL OR SENSOR FAULT ALARM

System provides combine alarm for mains fail or sensor fault condition i.e. Normally open (NO) or normally close (NC) type contact.

All above sections continuously monitor the protected premises and generates respective alarms and also provide the trigger signal for remote alarms through potential free relay contacts. Those individual alarms can be further sent to the central control station or switch room.



SPECIFICATIONS

System configuration	
a] Fire zone	One
b] Fire sensor	Apollo ionization or optical smoke sensor
c] Door sensor	Magnetic door sensor
d] Front panel controls	1. Self Test switch for system check 2. Digital reset switch for fire alarm 3. Rocker switch for hooter mute
Audiovisual indications	
01] System on	Green indicator
02] Fire	Flashing twin red indicator & fire tone by internal speaker
03] Fire sensor open	Amber indicator & fault tone by internal speaker & external sounder
04] Fire sensor short	Amber indicator & fault tone by internal speaker
05] System armed	Green indicator
06] Door open	Red indicator & beeper tone
07] Mains fail	Amber indicator
08] Low battery	Red indicator & beeper tone

REMOTE ALARMS

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open / normally close as per your requirement and offers short contact during alarm condition.

Electrical specifications	
a] Operating supply	230 VAC +/- 10%, single phase @50 Hz
b] Power consumption	Min 1.5 W to Max 8.0 W
c] Battery backup	Through 12 V/ 4.5Ah S.M.F. battery backup (Approx 12 Hrs.)
Mechanical specifications	
a] Panel size	H X W X D 250 X 190 X 90 MM
b] Panel weight	2.0 Kg. (excluding sensors)
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting

FIRE ALARM SYSTEMS

MODEL ER 27

INTRODUCTION:
This fire, intruder, and temperature alarm system is specially designed to meet the safety requirements and to protect the unmanned equipment rooms from unpredictable events such as fire, unauthorized intrusion and unsafe room temperature. Under any of the above calamities, this integrated system generates separate audio-visual alarms and gives instant alert signal to the concern people so as to take the further action. Along with local alarms, this system provides remote alarms through PFC contacts and also provides digital signal / data through RS 232 port.

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Special tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C TEMPERATURE ALARM

The room temperature is continuously monitored by control panel. For this purpose RTD sensor is used, that senses the room temperature and if it exceeds the safe limit, system triggers the visual and remote alarms.

D REMOTE ALARMS

In additional to audiovisual local alarms, the control panel also trigger the relays that provides potential free contact for extension of individual alarm to central monitoring stations like switch center of cellular network

E DIGITAL SIGNAL / DATA ALRMS

In additional to remote alarms and local audiovisual alarms, this panel provides digital data for generated alarms through RS 232 port which can be directly interfaced with other communication equipment to central monitoring stations or switch center



SPECIFICATIONS

System configuration	
a] Fire zone	Two
b] Fire sensor	Apollo ionization or optical smoke sensor
c] Door sensor	Magnetic door sensor
d] Temperature sensor	RTD sensor
e] Front panel controls	1. Self Test switch for system check. 2. Digital reset switch for fire alarm. 3. Arm/Disarm key for intruder. 4. Rocker switch for hooter mute
Audiovisual indications	
01] System on	Green indicator
02] Fire (each zone)	Flashing twin red indicator & fire tone by internal speaker & external sounder
03] Fire sensor open	Amber indicator & fault tone by internal speaker
04] Fire sensor short	Amber indicator & fault tone by internal speaker
05] System armed	Green indicator
06] Door open	Red indicator & beeper tone
07] Exit delay on	Red indicator & beeper tone
08] Temperature high	Red indicator
09] Supply fail	Amber indication
10] System fail	Red indication

ALARMS THROUGH PFC

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open / normally close as per your requirement

Alarms through RS 232 port	
1]	Fire alarm zone 1
2]	Fire alarm zone 2
3]	Door open alarm
4]	Room temperature high alarm
5]	Fire sensor fail alarm
6]	Input supply fail alarm (LO or HI)
Electrical specifications	
a] Operating supply	48 VDC
b] Power consumption	Min 2.0 W to Max 18 W
c] Operating condition	Temperature range : 0 to 50°C Relative humidity : 40 to 75 %
Mechanical specifications	
a] Panel size	H X W X D 300 X 240 X 90 MM
b] Panel weight	1.8 Kg. (excluding sensors)
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting

FIRE ALARM SYSTEMS

MODEL E 31

INTRODUCTION:

This fire alarm and security system is exclusively designed to meet the Safety requirements and to protect the unmanned equipment rooms, Microwave stations, exchanges etc. from unpredictable events such as fire, unauthorized intrusion, robbery etc. Control panel E 31 comprises three independent sections which continuously monitor the protected premises and generates the corresponding alarm if any of the above condition persists within the premises..

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Special tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C TEMPERATURE ALARM

The room temperature is continuously monitored by control panel. For this purpose RTD sensor is used, that senses the room temperature and if it exceeds the safe limit, system triggers the visual and remote alarms.

All above sections continuously monitor the protected premises and generates respective alarms and also provide the trigger signal for remote alarms through potential free relay contacts. Those individual alarms can be further sent to the central control station or switch room.



OPTIONAL FEATURE: FIRE SENSOR FAIL ALARM

Fire sensor and its connecting cable has a vital role in the circuit therefore those are continuously monitored electrically, if either of them get short or open by any means, the circuit triggers remote alarm, fault tone and glows corresponding indicator on front panel.

SPECIFICATIONS

System configuration	
a] Fire zone	One
b] Fire sensor	Apollo ionization or optical smoke sensor
c] Door sensor	Magnetic door sensor
d] Temperature sensor	RTD sensor
e] Front panel controls	1. Self Test switch for system check 2. Digital reset switch for fire alarm 3. Arm/Disarm key for intruder
Audiovisual indications	
01] System on	Green indicator
02] Fire	Flashing twin red indicator & fire tone by internal speaker & external sounder.
03] Fire sensor open	Amber indicator & fault tone by internal speaker
04] Fire sensor short	Amber indicator & fault tone by internal speaker
05] System armed	Green indicator
06] Door open	Red indicator & beeper tone
07] Exit delay on	Red indicator & beeper tone
08] Temperature high	Red indicator

REMOTE ALARMS

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open / normally close as per your requirement and offers short contact during alarm condition.

Electrical specifications	
a] Operating supply	24 VDC / 48 VDC
b] Power consumption	Min 1.5 W to Max 8.0 W
Mechanical specifications	
a] Panel size	H X W X D 260 X 195 X 90 MM
b] Panel weight	1.8 Kg. (excluding sensors)
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting

FIRE ALARM SYSTEMS

MODEL E 31i

INTRODUCTION:
This fire, intruder & temperature alarm system is specially designed to meet the safety requirements and to protect the unmanned equipment rooms, microwave stations, exchanges etc. from unpredictable events such as fire, unauthorised intrusion and unsafe room temperature.E 31i comprises three independent sections which continuously monitor the protected premises and on generation of any alarm i.e. fire, door & temperature alarm, this system offers audiovisual local alarms as well as potential free relay contacts for remote alarm.

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Beeper tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C TEMPERATURE ALARM

The room temperature is continuously monitored by control panel. For this purpose RTD sensor is used, that senses the room temperature and if it exceeds the safe limit, system triggers the visual and remote alarms.

All above sections continuously monitor the protected premises and generates respective alarms and also provide the trigger signal for remote alarms through potential free relay contacts. Those individual alarms can be further sent to the central control station or switch room.



OPTIONAL FEATURE: FIRE SENSOR FAIL ALARM

Fire sensor and its connecting cable has a vital role in the circuit therefore those are continuously monitored electrically, if either of them get short or open by any means, the circuit triggers remote alarm,fault tone and glows corresponding indicator on front panel.

SPECIFICATIONS

System configuration	
a] Fire zone	One
b] Fire sensor	Optical or ionisation smoke sensor.
c] Door sensor	Magnetic door sensor
d] Temperature sensor	RTD sensor
e] Front panel controls	Push to on switch for 1) System check 2) Fire alarm / sounder mute 3) Arm/Disarm for intruder alarm
Audiovisual indications	
01] System on	Green indicator
02] Fire	Flashing twin red indicator, beeper tone & external sounder
03] Fire sensor open	Amber indicator & beeper tone
04] Fire sensor short	Amber indicator & beeper tone
05] Door armed	Green indicator
06] Door open	Red indicator & beeper tone
07] Exit delay on	Red indicator & beeper tone
08] Temperature high	Red indicator

REMOTE ALARMS

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open in normal condition and provide short contacts during alarm condition. However NO / NC selection link is provided on main card for selection of alarm type as per user requirement.

Electrical specifications	
a] Operating supply	24 VDC / 48 VDC
b] Power consumption	Min 1.5 W to Max 8.0 W
Mechanical specifications	
a] Panel size	H X W X D 230 X 175 X 70 MM
b] Panel weight	1.3 Kg. (excluding sensors)
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting

FIRE ALARM SYSTEMS

MODEL E 48

INTRODUCTION:
This fire, intruder, temperature & mains fail alarm system is specially designed to meet the safety requirements and to protect the unmanned equipment rooms from unpredictable events such as fire,unauthorized intrusion and unsafe room temperature. E 48 comprises four independent sections which continuously monitor the protected premises and on generation of any alarm i.e. fire, door, temperature high & mains fail alarm, and this system offers audiovisual local alarms as well as potential free relay contacts for remote alarm.

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Beeper tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C TEMPERATURE ALARM

The room temperature is continuously monitored by control panel. For this purpose RTD sensor is used, that senses the room temperature and if it is exceeds the safe limit, system triggers the visual and remote alarms.

D MAINS FAIL ALARM:

System provides alarm for mains fail. Normally Closed (NC) type contact.



All above sections continuously monitor the protected premises and generates respective alarms and also provide the trigger signal for remote alarms through potential free relay contacts. Those individual alarms can be further sent to the central control station or switch room.

SPECIFICATIONS

System configuration	
a] Fire zone	One
b] Fire sensor	Apollo ionization or optical smoke sensor
c] Door sensor	Magnetic door sensor
d] Temperature sensor	RTD sensor
e] Front panel controls	Push to on switch for 1) System check 2) Fire alarm / sounder mute 3) Arm/Disarm for intruder alarm
Audiovisual indications	
01] System on	Green indicator
02] Fire alarm	Flashing twin red indicator, beeper tone & external sounder
03] Fire sensor open	Amber indicator & beeper tone
04] Fire sensor short	Amber indicator & beeper tone
05] Door armed	Green indicator
06] Door open	Red indicator, beeper tone & external sounder
07] Exit delay on	Red indicator & beeper tone
08] Temperature high alarm	Red indicator & beeper tone
09] Mains fail	Red indicator

REMOTE ALARMS

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open in normal condition and provide short contacts during alarm condition. However NO / NC selection link is provided on main card for selection of alarm type as per user requirement.

Electrical specifications	
a] Operating supply	24 VDC / 48 VDC
b] Power consumption	Min 1.5 W to Max 8.0 W
Mechanical specifications	
a] Panel size	H X W X D 255 X 190 X 60 MM
b] Panel weight	1.8 Kg. (excluding sensors)
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting

FIRE ALARM SYSTEMS

MODEL E 71

INTRODUCTION:
This fire alarm and security system is exclusively designed to meet the safety requirements and to protect the unmanned equipment rooms, microwave stations, exchanges etc. from unpredictable events such as fire, unauthorized intrusion, robbery etc.E 71 comprises four independent sections which continuously monitor the protected premises and on generation of any alarm i.e. fire, door, motion & mains fail alarm. This system offers four independent potential free contacts for extension of remote alarm to operator.

SYSTEM BASIC FEATURES

A FIRE ALARM

The control panel generates audiovisual alarm on receipt of trigger commands from fire sensor. Beeper tones are used to indicate the fire condition. This will alert the local staff so as to activate the fire fighting device or to take other appropriate measures.

B INTRUDER ALARM

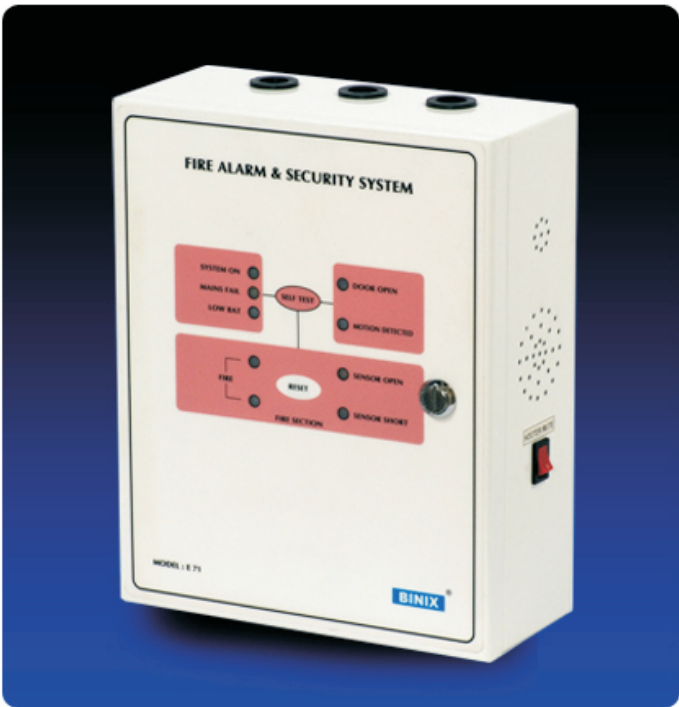
Unmanned equipment rooms such as microwave stations or exchanges are monitored and protected from unauthorized entry. For this purpose magnetic door sensors are used to trigger the control circuit that generates the audiovisual alarm.

C MOTION DETECTION ALARM

System provides audiovisual alarm whenever motion is detected within the shelter.

D MAINS FAIL ALARM

System provides alarm for mains fail. Normally Closed (NC) type contact.



All above sections continuously monitor the protected premises and generates respective alarms and also provide the trigger signal for remote alarms through potential free relay contacts. Those individual alarms can be further sent to the central control station or switch room.

SPECIFICATIONS

System configuration	
a] Fire zone	One
b] Fire sensor	Apollo ionization or optical smoke sensor
c] Door sensor	Magnetic door sensor
d] Motion sensor	Passive Infrared Sensor
e] Front panel controls	1. Self Test switch for system functionality check 2 Digital reset switch for fire alarm 3.Rocker switch for hooter mute
Audiovisual indications	
01] System on	Green indicator
02] Mains fail	Amber indicator
03] Low bat	Red indicator
04] Fire	Flashing twin red indicator & fire tone by internal speaker & external Sounder
05] Fire sensor open	Amber indicator & fault tone by internal Speaker
06] Fire sensor short	Amber indicator & fault tone by internal speaker
07] Door open	Red indicator & beeper tone
08] Motion Detected	Red indicator & external hooter

REMOTE ALARMS

All remote alarms are separately provided through potential free relay contacts. All relays remain normally open / normally close as per your requirement and offers short contact during alarm condition.

Electrical specifications	
a] Operating supply	230 VAC +/- 10%, single phase @ 50 Hz.
b] Battery backup	Through 6 V/4.5Ah (2 Nos.) Battery backup Approx. 10 Hrs.
b] Power consumption	Min 1.5 W to Max 8.0 W
Mechanical specifications	
a] Panel size	H X W X D 260 X 210 X 90 MM
b] Panel weight	4 kg with battery
c] Panel color	Off white with polycarbonate front sticker
d] Panel mounting	Vertical wall mounting