

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
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 +/- 10%
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