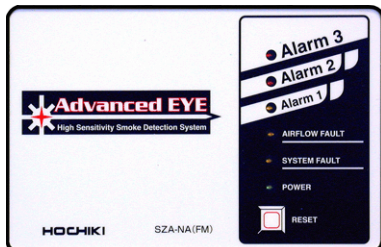


# SZA-NA - HIGH SENSITIVITY SMOKE DETECTION SYSTEM



## STANDARD FEATURES

- Detects very low density smoke
- 200 m<sup>2</sup> detection area (2150 ft<sup>2</sup>)
- No filter necessary
- N/O or N/C alarm contacts form A, form B
- Automatic and manual laser tests
- Four selectable sensitivity ranges:
  - \*Sensitivity 1: 0.005 to 0.1%/m (0.002 to 0.03%/ft)
  - \*Sensitivity 2: 0.01 to 0.2%/m (0.003 to 0.06%/ft)
  - \*Sensitivity 3: 0.025 to 0.5%/m (0.008 to 0.15%/ft)
  - \*Sensitivity 4: 0.25 to 5.0%/m (0.08 to 1.55%/ft)
- 3 alarm levels:
  - \*Alarm 1 (low)
  - \*Alarm 2 (medium)
  - \*Alarm 3 (high)



Exploded View of Front Panel



## DESCRIPTION

The Hochiki America SZA-NA high sensitivity smoke detection system is capable of detecting minute particles of smoke. The SZA-NA is ideal for applications where response time is critical. It provides the earliest response to fires available. The SZA-NA provides a detection solution for rooms with high air flow, and rooms with large open spaces.

## SPECIFICATIONS

Power Supply	24 VDC ± 10% 0.5A or less
Current Output	4-20mA DC output (Receiving resistance: 100 ohm or less)
Contact Output	Alarm 1 output, Alarm 2 output, Alarm 3 output, & System Fault output
Contact Capacity	24 VDC, 0.5A or less (each contact output)
Contact Output Logic	NO (form A) or NC (form B) selectable by a jumper pin
AC Power Supply Monitoring Input	NO (form A) or NC (form B) selectable by system setting
Internal Wiring	Heat-resistance shielded wires
Materials	Body & panel: Steel plate of 0.8 mm thick, baked painting Display operating panel: Steel plate of 1.0 mm thick
Colors	Body & panel: Munsell 2.5Y9/1 or equivalent Display operating panel: Munsell 5Y6/0.5 or equivalent
Weight	Approximately 8.2 lbs. (3.7kg.)
Dimensions	12.48" W x 8.86" H x 4.00" D 317mm x 225mm x 102mm
Operating Temperature	14°F to 122°F (-10 °C to +50 °C)
Installation	Indoor (Non-condensing)
Accessory	Dedicated flexible pipe

Specifications subject to change without notice.

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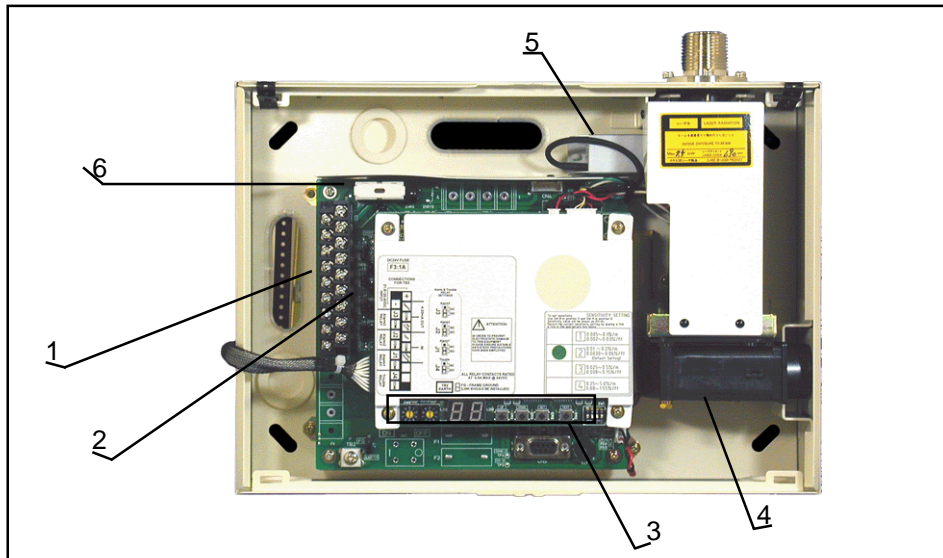


## OPERATION

An aspirating smoke detection system continuously draws air from the monitored area into the sampling pipes. The air is drawn from the sampling pipes into the main sampling unit. In the main sampling unit, the air is analyzed by very sensitive laser detection components. The laser detection components constantly monitor for the presence of smoke particles.

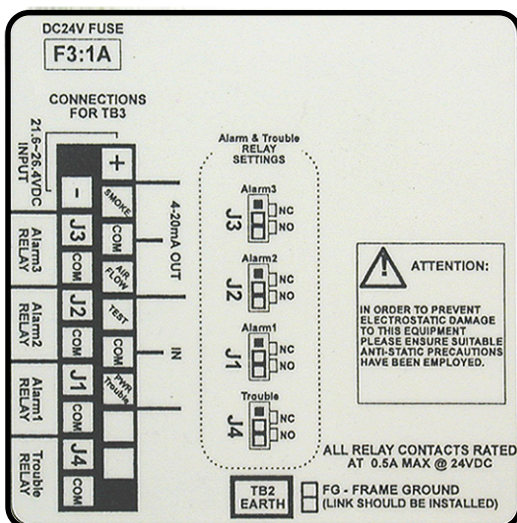
If smoke particles are detected, the unit will activate the alarm output relays in accordance with the sensitivity selected and the alarm level reached. The SZA-NA High Sensitivity Smoke Detector is between 20 and 1000 times more sensitive than spot-type smoke detectors. The SZA-NA has three alarm stages. Alarm 1 is the lowest obscuration alarm (high sensitivity), activating when very small amounts of smoke are detected. The Orange Alarm 1 LED will light, and the Alarm 1 relay will activate. As the smoke density reaches alarm level 2, the Red Alarm 2 LED will light and Alarm 2 relay will activate. As the smoke density reaches alarm level 3, the Red Alarm 3 LED will flash and the Alarm 3 relay will activate.

The SZA-NA is ideal for use in areas such as computer server rooms, clean rooms, telecommunication equipment rooms, medical equipment/operating rooms, power generation plants, and many other applications. By continuously sampling the area, the SZA-NA can provide the earliest warning of the presence of smoke, even before the smoke is visible to the human eye.



1 – Relay Connections    2 – Jumpers (N/O or N/C)    3 – Programming Display  
 4 – Fan Unit    5 – Laser Unit and Air Flow Sensor    6 – 24 VDC Fuse

## TERMINAL BLOCK



## MOUNTING

