

# PROTECVIEW™

## Aspirating Super-High Sensitivity Smoke Detection System



### Features

- Smoke detection with wider range of sensitivities, from super-high to low levels (0.001 to 20%/m)
- Large flow rate fan (Max. shutoff pressure: At least 350Pa, Max. flow rate: At least 170ℓ/min)
- Smoke particles with a variety of particle sizes can be detected due to Total Scattered Light Detection Principle
- Smoke density can be checked easily in real time by means of the bar graph indicators
- Event log function: Up to 18,000 events (detector status, smoke density trend, etc.) per detector
- Input rated voltage: 100VAC, 24VDC
- Stand Alone Type

### Sampling Fan

Air sampled by the turbo type large flow rate sampling fan is stirred in the fan to be made uniform and then, a part of it is sent to the sensing chamber through the filter. Due to a powerful aspiration capacity of the fan, air can be sampled and introduced into the detector even under strong wind and through the long sampling piping.

### Filter

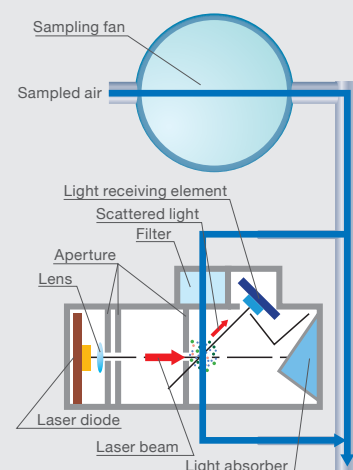
As dust in the sampled air, which may cause contamination in the detector and false alarms, is removed when it passes through the filter, it is possible to measure the smoke density with high accuracy for long time.

### Sensing Chamber

In the sensing chamber, the sampled air is irradiated with a laser beam and the light receiving element detects all the light scattered by the smoke particles in the sampled air. Due to the Total Scattered Light Detection Principle which emits a laser beam in wide range, it is possible to detect a wide variety of particle sizes ranging from very small one (0.1μm or less) to large one.

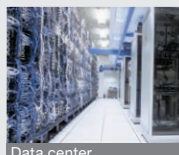
The output of the laser beam is kept constant with the automatic control function, ensuring smoke detection with higher sensitivity for long period. Therefore, the extremely wide range of smoke detection (0.001 to 20%/m) can be achieved.

### Detector Configuration



### Typical Installations

Server rooms, communication equipment rooms, clean rooms, switchboard facilities, storages, art museums, museums, semiconductor manufacturing equipment, other facilities and equipment essential for business continuity



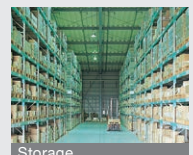
Data center



Clean room

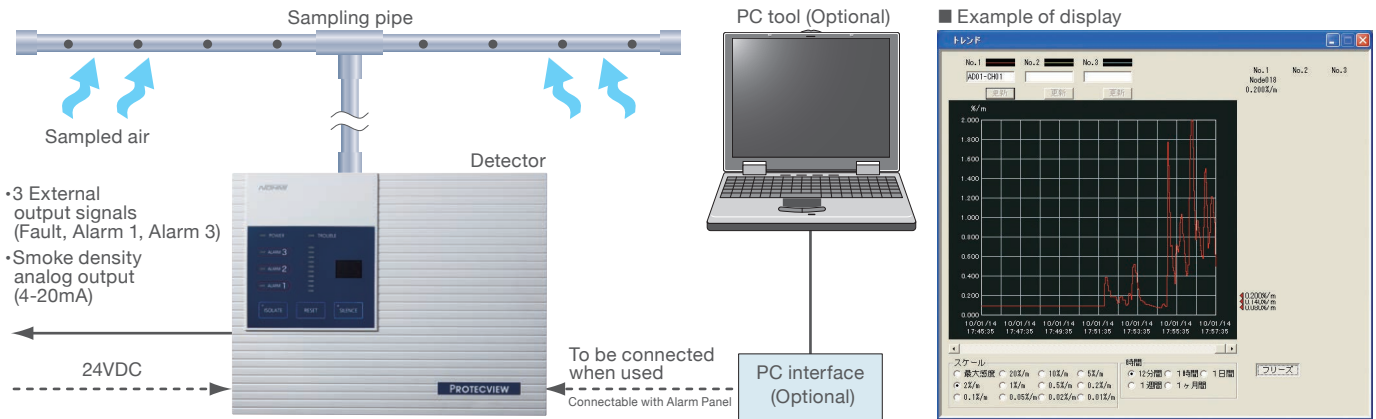


Switchboard facilities

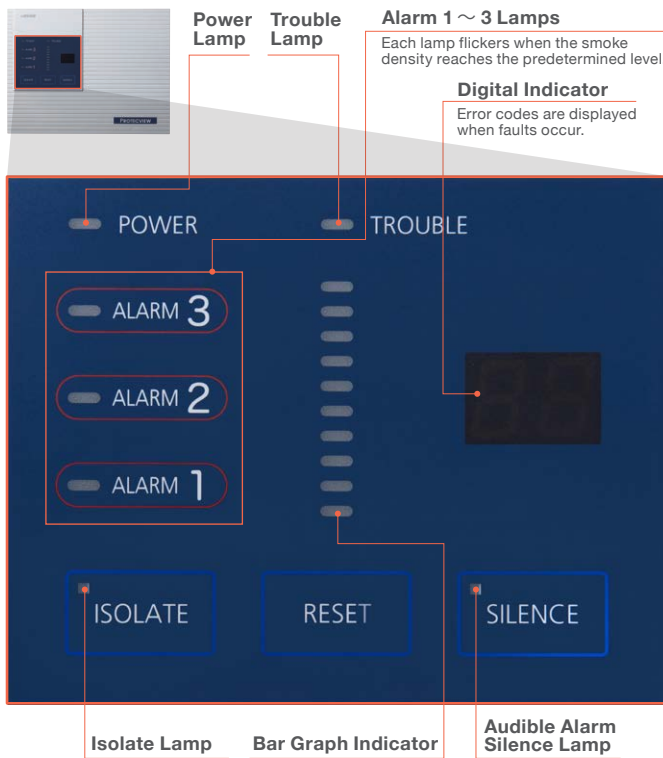


Storage

# System Configuration



## Function



## Specification

### PROTECVIEW™ Detector (Stand Alone Type)

Model No.	FDNA002-R
Detection principle	Total Scattered Light Detection Method
Weight	Approx. 2 kg
Outside dimensions	W305×H235×D94.5mm
Power supply voltage	100VAC/24VDC, changeover
Power/current consumption	Max. 30W(100VAC), Max. 550mA(24VDC)
Detection range	Light obscuration rate:0.001 – 20%/m (Alarm setting range : 0.01 – 20%/m)
Indicator lamps	7-LEDs (Alarm 1, 2 & 3, Power, Fault, Isolation, Audible Alarm Silence), Bar Graph Indicator, Digital Indicator
Output signals	[Contacts signal] Contacts rating : 1A@30VDC Fault, Alarm 1, Alarm 3 [Others] Smoke density analog output (4-20mA)
Event log	Max. 18,000 events
Ingress Protection Rating	IP30
Operation temperature and humidity	Ambient temperature for detector : -10 ~ 50 °C Sampled air : -10 ~ 50 °C Humidity : 95 %Rh or less (no condensation)

- The information contained herein does not purport to cover all the details or variations of the equipment described, nor to provide for every possible contingency that may be met in connection with its installation, operation or maintenance.
- Specifications are subject to change without notice. Contact Nohmi before relying on the information.
- Actual performance is based on proper application of the product by a qualified professional.
- Should further information be required or should particular concerns arise that are not covered sufficiently for the purchaser's purposes, the matter should be referred to Nohmi or your nearest distributor.
- "PROTECVIEW" is the trade mark of NOHMI BOSAI LTD.

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