

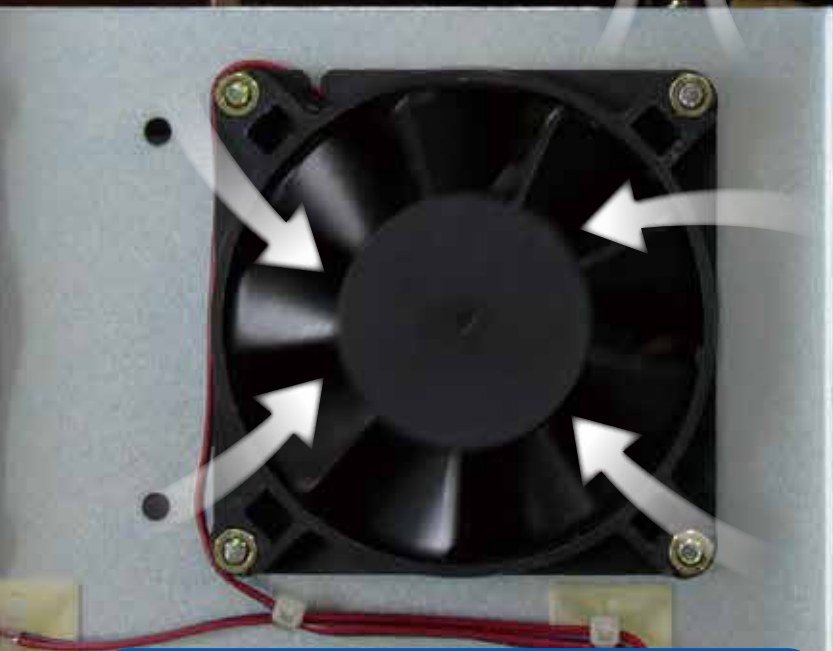
Smoke detector with built-in suction fan "F1HQ"



For the first time ever, a fan is built into the world's smallest class smoke detector

The world's first smoke detector with built-in fan

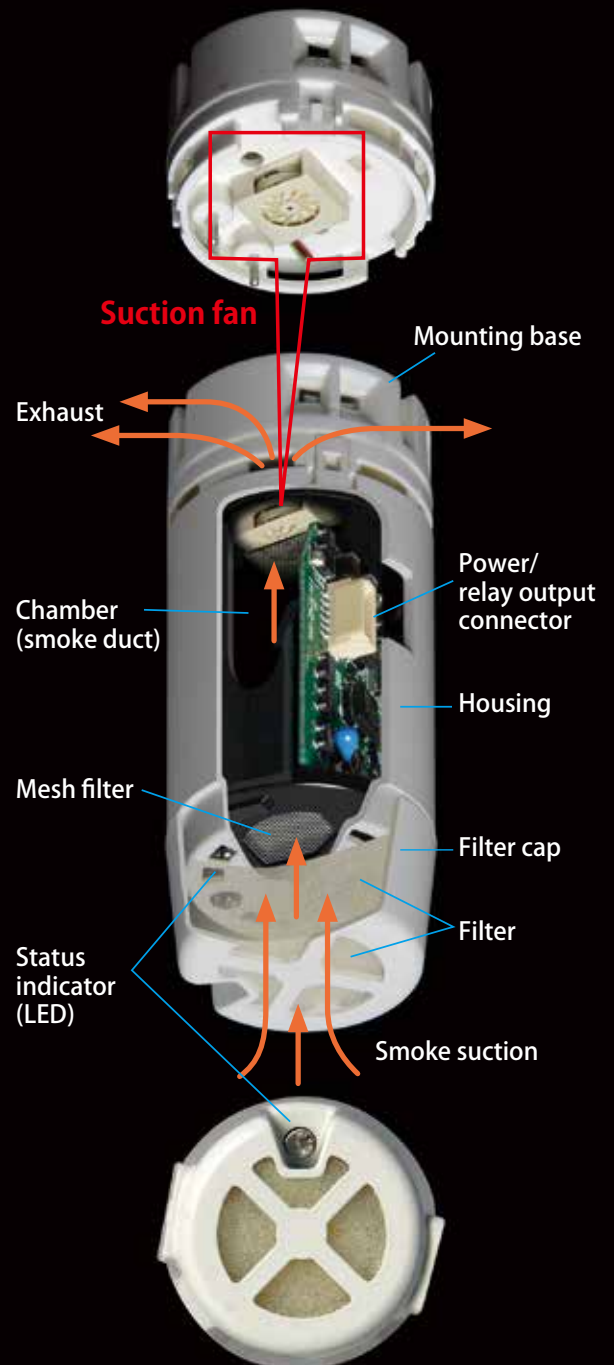
Detection is possible even where wind speed is high because scattered smoke particles are sucked in by the fan.



Selectable sensitivity
• Settable range: 0.5~5%/m • Set-up increment: 0.5%/m

Selectable output
Alarm contact and trouble contact can be selected as A contact or B contact

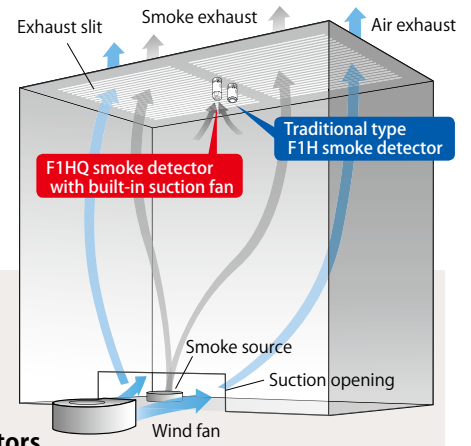
F1HQ actively sucks in the smoke with the internal miniature fan.



F1HQ can detect the scattered smoke by sucking with the internal fan even in high speed wind flow area.

Features

Providing the world's smallest class smoke detector with a built-in small-size fan, F1HQ makes possible early detection of scattered smoke particles where air currents are rapid. In addition, this product is a stand-alone device that requires no transmitter; thus, alarm signals in case of fire, or trouble signals, can be obtained just by supplying DC 24 V.



Comparative experiments on smoke detection performance assuming a server rack with high wind speed

Detection sensitivity:

Alarm is set to 0.5%/m

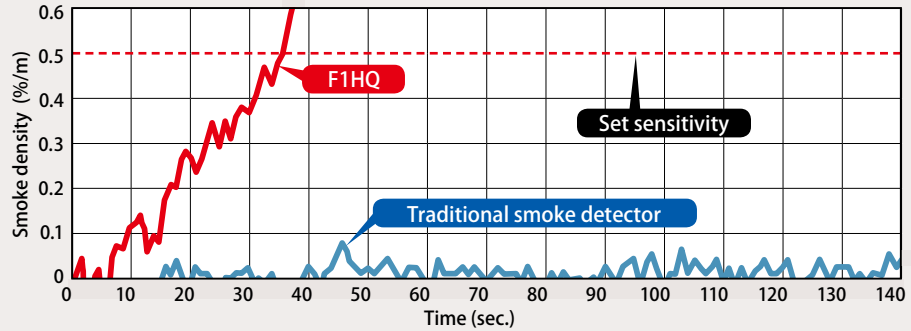
Experimental environment:

Height 550 x Width 700 x Depth 250 mm
Wind fan's flow rate 1,340 L/min
(Open ceiling)

Experimental results

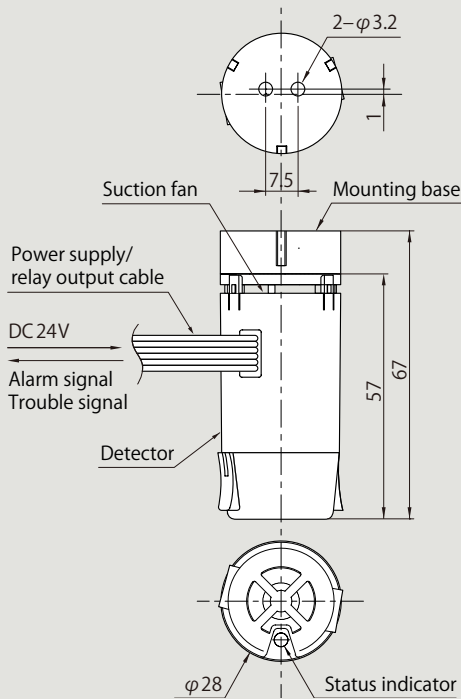
Model	Detection time
F1HQ smoke detector with built-in fan	36 sec.
Traditional smoke detector	Not detected

Smoke detection state of both detectors



Specifications

Dimensions



Electrical	Type	Photoelectric smoke detector
	Rated current	DC 20 mA
	Power supply	DC 24 V ± 10%
	Alarm setting	0.5~5%/m
Mechanical	Status indicator	Red LED Monitoring: Blink per 10 sec. Alarm: Blink per 1 sec. Trouble: Light off
	Contact output	Contact rating: DC 24 V, 0.5 A (resistance load) Contact state: Monitoring: Both contacts close Alarm: alarm contact open Trouble: trouble contact open Power-off: Both contacts open
	Restoration	Automatic restoration
	Suction rate	1 L/min
Environment	Filter	Collection efficiency: 70% or higher
	Material	ABS (UL-94V-0)
	Color	White
	Weight	approx. 25 g (mounting base included)
Accessories	Operating temperature range	-10°C ~ 60°C
	Storage temperature range	-20°C ~ 75°C
	Operating humidity range	30~85% RH (no condensation)
Approved standards	Mounting base, relay transfer contact connector cable	
EMC	UL61010-1 File no.E339756 recognizes as Aerosol Monitor Sensor	
	EN55011:2009+A1:2010 EN50130-4:2011	

Fenwal® FENWAL CONTROLS OF JAPAN, LTD.
<http://www.fenwal.co.jp>

Head Office / Tokyo Business Office :

Kyohan Kudan Building, 1-5-10 Iidabashi, Chiyoda Ward, Tokyo
JAPAN 102-0072 Phone: +81-3-3237-3565 Fax: +81-3-3237-3569

R&D Center :

232 Tobukicho, Hachioji-shi, Tokyo, JAPAN 192-0001 Phone: +81-42-691-0121

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* Contents of this catalog are effective as of June 2017.