# Santacary i2 Formaldehyde Detector User Manual

Santacary i2 is a precise indoor air quality detector suitable for monitoring low level concentrations of hazardous formaldehyde vapors in mg/m3. It cans measures formaldehyde (HCHO) concentration in a range of 0-5 mg/m3 and a resolution of 0.01 mg/m3.

i2 can be widely used in the new office, new home, super market, gardening, furniture, wooden floor, indoor decoration, medical, food, wall papers, construction materials construction, paper manufacture, industrial safety, labor-working place, etc. for indoor formaldehyde gas detection, test and verify the efficiency of the air purifier and formaldehyde removing detersive.

Please read these instructions carefully before use. This operation manual will provide you with all the necessary information for the correct use of your i2 Formaldehyde detector.

### FEATURES

- $\diamond$  One button operation.
- ♦ Large LCD display
- ♦ Electrochemical sensor for formaldehyde detection, no consumable parts.
- ♦ Two AAA Alkaline Batteries

### THEORY OF OPERATION

The Santacary i2 Formaldehyde Detector uses two-electrode electrochemical technology, operating by the diffusion principle, for determining the concentration of formaldehyde in air samples.

### **INTERFERENCES**

This Formaldehyde Detector is not totally specific to formaldehyde alone, being susceptible to a degree of interference from a small range of other chemicals. Some representative examples of the cross interference chemicals are shown below.

Substance	Cross Sensitivity (%)
СО	1
H2	0.1
SO2	12
NH3	0
CO2	0
Ethanol, methanol	50
Phenol	7

Extremes of humidity may cause a background reading on measurement.

### DETECTOR

- 1. LCD display
- 2. Power button
- 3. Air vent



### OPERATION

When the detector is turned off, press Power button to turn on the unit. Press Power button again to turn off the unit. When the unit is first turned on, it performs 15 seconds countdown for detector warm up, then enters normal display. The detector updates readings every 2 seconds. The HCHO Unit is **mg/m3**.

# SPECIFICATIONS

# **HCHO Specification:**

Measurement Range	0~5.0ppm
Resolution	0.01ppm
Temperature Range	-10 to 40°C (14~104°F)
Humidity Range	15 to 90%RH
Temperature Drift	0.35%/°C
Baseline Drift (20-40°C)	0.00ppm
Response Time	<30 Seconds

### General:

Operating	-10°C ~ 40°C (14°F ~ 104°F),15~90% RH	
	non-condensing	
Storage	-10°C ~ 60°C( 14°F to 140°F),<99% RH	
	non-condensing	
Power Supply	Two AAA Alkaline Batteries	
Dimensions	67x124x25mm (2.64x4.88x0.98")	
Weight	120 grams (4.23oz.)	

### CLEANING AND STORAGE

The front panel and case can be cleaned with a mild solution of detergent and water. Apply sparingly with a soft cloth and allow drying completely before using. Do not use aromatic hydrocarbons or chlorinated solvents for cleaning.

### WARRANTY

The i2 is warranted to be free from defects in material and workmanship for a period of two year from the date of purchase. This warranty covers normal operation and does not cover misuse, abuse, alteration, neglect, improper maintenance.



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