# Model 1001C Zero Air Source
## The New Standard for Zero Air Generation

### Overview

The Model 1001C Zero Air Source is designed to meet the requirements for clean-dry air when used by a dilution calibrator, purge air for permeation tube ovens, supply air for test chambers, and pollutant free air for other laboratory or environmental applications.

The 1001C offers an option for communication connectivity to the already proven performance and longevity of the Sabio Model 1001 for remote monitoring. Also offered as an option to the 1001C enhanced pneumatic design is the "self healing" feature that monitors the units moisture levels and intuitively initiates the dryers without being prompted by the user.

Equipped with dual coalescent filters and a permeation drier, moisture removal is enabled automatically using adjustable control circuitry or manual purging from the front panel. Additionally, the air source can be controlled automatically by a dilution calibrator, remotely by contact closure, or when installed on demand with an internal pressure sensor.

Air pollutants are removed using reusable dual rear mounted clear scrubber canisters for NO, $NO_2$, $O_3$, $SO_2$, $H_2S$. Other pollutants such as carbon monoxide (CO) or hydrocarbons (HC) can be removed with an internal heated oxidizer.
Both types of internal heated oxidizers come equipped with front panel mounted temperature controllers which monitor and display the temperature for optimum performance.

### Standard Features

- Output 30 SLPM at 35 psig (requires high flow tttfilter)
- Condensate/purge valve that operates both automatically and manually to drain
- Front panel pressure gauge
- Front panel adjustable pressure gauge
- Front panel purge switch
- Automatic control via contact control or a switched low voltage DC power source
- Internal permeation dryer
- Media canisters for removal of NO, NOx, NO2, SO2, H2S, NH3, & O3
- Dual piston, oil-free, long lasting pump

### Specification
Specifications subject to change without notice

| Output Concentration | NO, NO$_2$, SO$_2$, H2S<br>O$_3$ | < 0.025 ppb<br>< 0.3 ppb |
|---|---|---|
| With CO oxidizer | CO | < 10 ppb |
| With HC oxidizer | NH$_3$<br>Hydrocarbons | < 0.10 ppb<br>< 0.20 ppb |
| Mechanical | 8.75" x 16.2" x 22.25" (22.2cm x 41.2cm x 56.5cm |  |
| Weight | 55lbs. standard unit<br>65lbs. with HC oxidizer |  |
| Electrical | 110V-120V, 60 Hz or<br>220V-240V, 50/60 Hz |  |
| Communication | 1 x Ethernet: 10/100Base-T (optional)<br>1 x RS232 (115,200 baud rate)<br>Modbus or ML protocol (optional) |  |
| Dewpoint | -20ºC up to 15 SLPM/-10ºC above 15 SLPM |  |
| Operating Temperature | 5 - 40ºC |  |
| Standard Warranty | Two year |  |

### Optional Features

- Internal or external CO oxidizer
- Internal or external HC oxidizer
- Internal pressure sensors for on-demand pump control and for monitoring output pressure
- Output flow meter
- Rack mount kit
- Dew point sensor with LED indicators
- Trace level scrubbers
- CO2 scrubber
- Regenerative heatless dryer
- Ethernet Connectivity

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