

# Model 1001 Zero Air Source

## Overview

The Model 1001 Zero Air Source is designed to meet the requirements of clean, dry air for dilution calibrators, purge air for permeation tube ovens, supply air for test chambers and pollutant free air for other laboratory or environmental applications.

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, upon completion of calibration, the air source can be controlled automatically by a Sabio dilution calibrator or remotely by contact closure or when installed on demand with an internal pressure switch.

Air pollutants are removed using reusable dual rear mounted scrubber canisters for NO, NO<sub>2</sub>, O<sub>3</sub>, SO<sub>2</sub>, H<sub>2</sub>S. Other pollutants such as carbon monoxide (CO) or hydrocarbons (HC) can be removed with an internal oxidizer. Both types of internal oxidizers come equipped with front panel mounted temperature controllers which monitor and control the temperature for optimum performance.



## Standard Features

- ▶ Standard 30 SLPM at 35 psig air delivery
- ▶ 3.4 liter surge/condensate tank
- ▶ Condensate/purge valve that operates both automatically and manually to drain condensate
- ▶ Front panel mounted pressure gauge
- ▶ Front panel mounted adjustable pressure regulator
- ▶ Front panel mounted purge switch
- ▶ Automatic control via contact control or a switched low voltage DC power source
- ▶ Internal moisture removal system
- ▶ Media canisters for removal of NO, NO<sub>x</sub>, NO<sub>2</sub>, SO<sub>2</sub>, H<sub>2</sub>S, NH<sub>3</sub> & O<sub>3</sub>
- ▶ Dual Piston, Long-life brushless, oil-free, diaphragm-free pump

## Optional

- ▶ Internal or external CO catalytic oxidizer
- ▶ Internal HC catalytic oxidizer
- ▶ Internal pressure switch for on-demand pump control
- ▶ Output flow meter
- ▶ Rack-mount kit
- ▶ Dew Point Indicator with LED Indicators
- ▶ Trace Level Scrubbers
- ▶ CO<sub>2</sub> Scrubber
- ▶ Regenerative heatless dryer

## Specifications

*Specifications subject to change without notice*

Air Quality	Standard Unit	NO, NO <sub>2</sub> , SO <sub>2</sub> , H <sub>2</sub> S, < 0.025 ppb O <sub>3</sub> < 0.3 ppb
	Standard unit with CO catalytic Oxidizer	NO, NO <sub>x</sub> , NO <sub>2</sub> , SO <sub>2</sub> , H <sub>2</sub> S, < 0.025 ppb, CO < 10 ppb, O <sub>3</sub> < 0.3 ppb
Mechanical	Standard unit with HC catalytic oxidizer	NO, NO <sub>x</sub> , NO <sub>2</sub> , SO <sub>2</sub> , H <sub>2</sub> S, < 0.025 ppb O <sub>3</sub> < 0.3 ppb CO < 10 ppb, NH <sub>3</sub> < .10 ppb & HC < 0.20 ppb
	Dimensions	H: 8.75 in. (22.2 cm) W: 16.2 in. (41.2 cm) D: 22.25 in. (56.5cm)
Electrical	Weight	55 lbs. with CO Oxidizer (25 kg) 65 lbs. with HC Oxidizer (30 kg)
	Standard	110V-120V, 60 Hz
	Optional	220V-240V, 50/60 Hz

## Smaller, Portable Zero Air Source Units Available

- ▶ Model 2020 – Low Output
- ▶ Model 2020-EXP - High Output