

PRODUCT DATASHEET

MAX300-BIO™

Bioreactor/Fermentation Mass Spectrometer



Fast Response

Process Control

Stable Measurement

- Quantitative analysis of individual contaminants
- PPT detection limits
- Analysis time in seconds
- Multiport sample systems for total site monitoring
- Precision & accuracy for safety and regulatory reporting
- Minimal maintenance required

SPECIFICATIONS

System Highlights:	
Detectable compounds	Any gas or vapor sample
Detection range	100% - 10 ppb standard, 10 ppb with the electron multiplier option*
Number of sample streams	16, 31, 40, 80+
Analysis rate	<0.4 seconds per component
Number of components	Unlimited
Number of analysis routines	Unlimited
Number of user configurable data tags	Unlimited
Analysis precision	<0.25% relative standard deviation**
Stability	<0.5% relative standard deviation over 30 days**
Dual filaments	One active and one spare with automatic switchover
Maintenance	Typically two PMs per year
Manual or fully-automated calibration and validation	
Mass range option	1-200, 300, or 500 amu
19 mm high-transmission quadrupole filter	

* Documented on trace benzene in air.

** Based on the analysis of 1% argon.

MAX300-AIR System Specifications

Power Supply Options:

- 120 VAC, 50/60 Hz, Two 15 Amp circuits
- 230 VAC, 50/60 Hz, One 20 Amp circuit

Power Consumption:

- Nominal 2500 Watts
- Startup 2750 Watts
- Heat Load: 2500 Watts (8500 BTU/Hr)

Weight:

- Standard Enclosure: 420 lbs (190 kg)
- ATEX Enclosure: 560 lbs (254 kg)
- Optional cart: 40 lbs (18 kg)

Ambient Requirements:

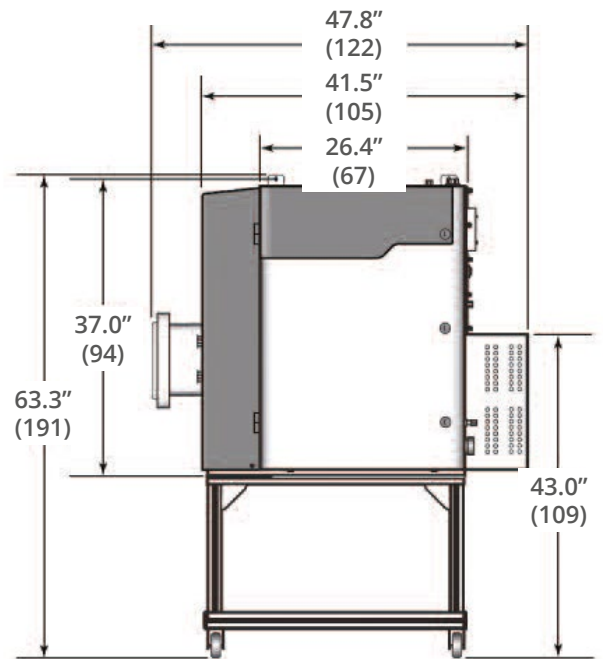
- Temperature: -4°F to 120°F (-20°C to 49°C)
- With A/C, cold start $\geq 54^\circ\text{F}$ (12°C)
- Area Classification Options:
 - General Purpose
 - Class 1, Division 2 Groups B, C, D, T3
 - Class 1, Division 1 Groups B, C, D, T3
 - ATEX Zone 1 or Zone 2, Group II B +H2, T4

Additional Utilities:

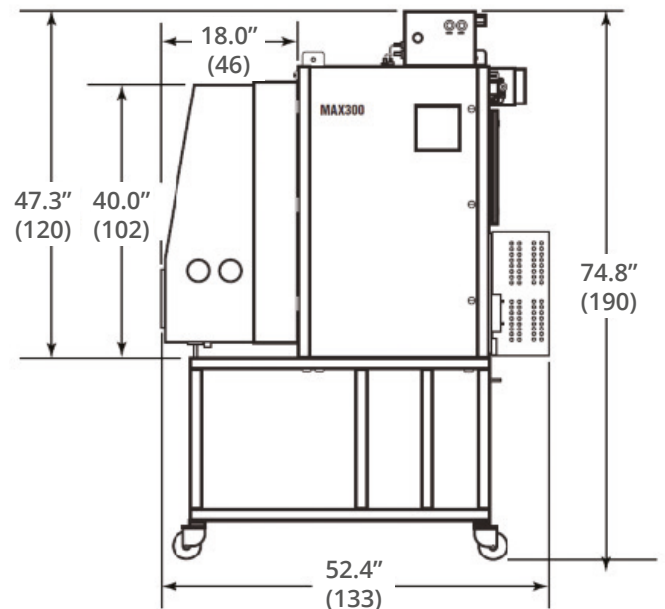
- Purge gas (for hazardous area installations)
- Base calibration requirement: 2 gas bottles

Data System and Communications:

- System control interface options: Ethernet, RS-422 4-wire
- Login security levels: Administrator, User, Viewer
- External communications:
 - Ethernet, Modbus serial, digital I/O, analog I/O, OPC



MAX300-BIO standard enclosure dimensions with A/C and Cart



MAX300-BIO ATEX enclosure dimensions with A/C and Cart

Dimensions shown in inches [cm]

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