

**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

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

\* Documented on trace benzene in air.

\*\* Based on the analysis of 1% argon.

# MAX300-BIO 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:

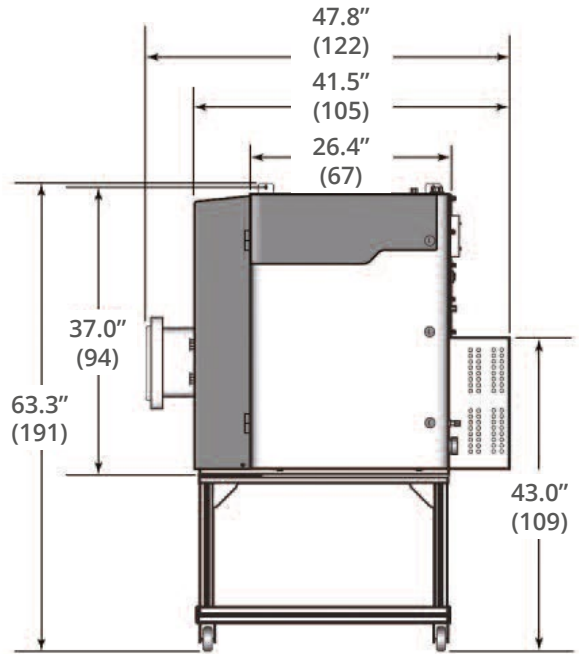
- Temperature: -4°F to 120°F (-20°C to 49°C)
- With A/C, cold start  $\geq 54^\circ\text{F}$  (12°C)
- Area Classification Options:
  - General Purpose
  - Class 1, Division 2 Groups B, C, D, T3
  - Class 1, Division 1 Groups B, C, D, T3
  - ATEX Zone 1 or Zone 2, Group II B +H2, T4

## Additional Utilities:

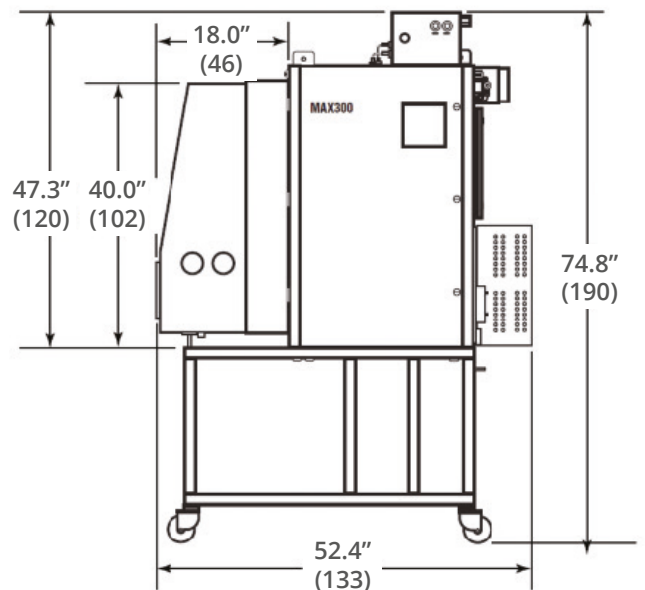
- Purge gas (for hazardous area installations)
- Base calibration requirement: 2 gas bottles

## 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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