



LabRAM™ II H

Second Generation Mixing Technology of Choice for Energetics Mixing



PYROTECHNICS



PROPELLANTS



MUNITIONS

The industry standard in hazardous and energetic development and processing

- **Class I Div I Class II Div I**
- **Vacuum System**



- **Jacketed Vessel**
- **Remote Operation**



Resodyn Acoustic Mixers' hazardous location **LabRAM™ II H** is specifically designed for mixing **LabRAM™ II H** introduces significant benefits to customers who rely on **ResonantAcoustic® Mixers** technology for high hazardous materials.

development mixer, the energetic materials. The government and defense quality and low-cost mixing of

Mixing and Processing Technology of Choice

Since its introduction to the energetics marketplace in 2007, **ResonantAcoustic® Mixers** have become the processing technology of choice at many government and commercial facilities. The technology allows users to employ intense, low-frequency acoustic mixing at up to 100g's of acceleration, without the several inherent issues associated with the use of conventional mixing. The advanced design features incorporated into the **LabRAM™ II H** reflect design and operational considerations provided to Resodyn by the energetics community over the past several years.

Integrated Component Design

The fully integrated **LabRAM™ II H** system brings all electronic, power, and control hardware onboard, eliminating the need for a separate cabinet. The **LabRAM™ II H** is fully functional with or without the an optional acoustic housing (not shown). All enclosure and housing materials are 304L stainless steel.

Innovative New Features and Options

The **LabRAM™ II H** responds robustly to energetic users' dynamic and demanding requirements:

- 2.2 Pounds/1,000 gram Capacity.
- Rated Class I Division I and Class II Division I.
- Jacketed Vessel provides mixing vessel temperature control from 302°F heating to 34°F cooling (optional).
- Temperature sensor - 316L resistance temperature detectors (RTDs) with m12 connector (optional).
- Automatic/programmable Mix Vacuum for application at any juncture of the processing/mixing cycle (optional).
- Remote control panel.
- Remote operation up to 2.5 miles.
- Onboard programmable control of mixing operations and permanent recording of operations and measured results.
- Sealed, hazardous rated, SS 304 mixing platform prevents entry of mixing materials into the enclosure.
- Laptop based human machine interface.
- Redundant ground paths mitigate static charge build-up.



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Introducing

LabRAM™ II H

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Comparison between LabRAM™ and LabRAM™ II H Specifications

| Item | Description | LabRAM™ | LabRAM™ II H |
|------|--|---|-----------------------------------|
| 1 | Maximum Payload Capacity | 1.1 lbs. | 2.2 lbs. |
| 2 | Enclosure Material | Stainless Steel, Powder Coated steel, and Anodized Aluminum | 304L Stainless Steel |
| 3 | Sealed Enclosure | No | Yes |
| 4 | Sound Emitted | <80 dB at 3' | <80 dB at 3' |
| 5 | Purged Enclosure | No | Yes |
| 6 | Enclosure Ground | Yes | Yes |
| 7 | Resonator Grounded | No | Yes |
| 8 | Payload Fixture Grounded | No | Yes |
| 9 | Vessel Temperature Monitoring | 2 thermocouples monitored external to LabRAM | 3 RTD's monitored and recorded |
| 10 | Automatic/Programmable Vacuum | No | Yes |
| 11 | Data Logging | No ⁱ | Yes |
| 12 | Remote Operation | Yes ⁱ | Yes |
| 13 | Class I Div 1 Ratable | No | Yes |
| 14 | Class II Div 1 Ratable | No | Yes |
| 15 | Recommended for use in Hazardous environment | No | Yes |
| 16 | Onboard Programmable Control and Recording | No | Yes |
| 17 | Weight | 170 lbs. ⁱⁱⁱ | 310 lbs. ^v |
| 18 | Dimensions (Resonator) | 16" W, 23.5" D, 26.5" H ⁱⁱ | 32" W, 30" D, 13" H ^{iv} |
| 19 | Dimensions (Electrical/Electronic Control Cabinet) | 7.5" W, 23.5" D, 16" H | Not Required –unit self-contained |

ⁱ Yes with RAMware²

ⁱⁱ With Acoustic Enclosure and Housing

ⁱⁱⁱ Resonator and Control Box

^{iv} 32" High with Acoustic Housing

^v 355 lbs with the Acoustic Housing



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and Manufacturers

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