



### THE Energetics Industry Standard

Specifically designed for mixing hazardous and energetic materials, government and defense customers rely on ResonantAcoustic® Mixers' (RAM) technology for safe, high quality, low-cost processing of energetic and hazardous materials. The **LabRAM II H<sup>TM</sup>** delivers better results, improved efficiency, and new product opportunities at a larger payload capacity. Each **LabRAM II H<sup>TM</sup>** configuration matches the right processing functions with critical processing demands, exceeding the performance of traditional technologies. Certifiable to Class I Div I, Class II Div I, Groups C-G environments and other standards.

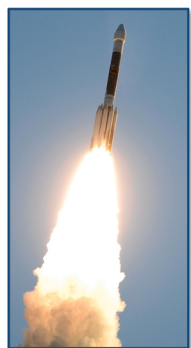
### Key Processing Capabilities

- Mixing and processing up to 2.2 lb (1 kg)
- Any combination of solids and powders from nano-scale and up, liquids and gasses, and viscous and slurry materials
- Coating, milling, grinding capabilities
- On-board control of processing accessories
- Mixing vessel temperature control from 392°F (200°C) heating to -40°F (-40°C) cooling\*
- Operate automatic or manual vacuum, reaching 10 Torr\*
- Monitor mixing parameters in real-time
- Download processing data for analysis and documentation
- Develop, store, and secure up to 100 recipes for permanent recording of operations and measured results

### Features of the LabRAM II H<sup>TM</sup>

- Intense, yet gentle acoustic mixing for rapid, highly-repeatable, ultra-high-quality results
- All housing and enclosure materials are sealed, purged, 304L stainless steel, preventing entry of processed materials into the enclosure
- Remotely mounted purge and pressurization system
- Redundant ground paths mitigate static charge build-up
- Remote Control Panel operation up to 2.5 miles (4 km)
- Laptop-based human machine interface (HMI)\*
- Multiple level security and access control
- Height-adjustable accepts many vessel types
- Temperature sensor - 316L stainless steel resistance temperature detectors (RTDs) with m12 connector, compatible with vacuum and temperature controls\*

\*Optional feature



Propellants



Pyrotechnics



Munitions



# Innovative Mixing Solutions

## LabRAM II H™



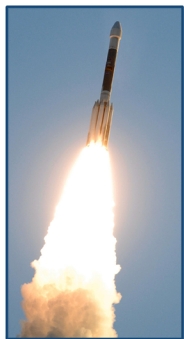
how you think about mixing and processing

### Global Mixing and Processing Technology

Since its introduction to the marketplace in 2007, ResonantAcoustic® Mixers' (RAM) technology has become the choice for many commercial mixing and processing applications. RAM's unique combination of features and performance has proven successful at Fortune 500 laboratories and production facilities in 38 countries across a broad range of industries.

### Specifications

General		Operating Specifications		Control Specifications	
Model	LabRAM II H™	Maximum Payload Capacity	2.2 lb (1 kg)	Human Machine Interface	Full Color Touch Screen
Technology	ResonantAcoustic Mixing	Compatible Materials	Solids, Liquids, Pastes, High Viscosity	Operating System	Proprietary On-Board
Intended Use	Laboratory, Development, Bench-Scale Mixing	Max Vessel Acceleration	100g at approximately 60 Hz	Programable Mix Recipe Storage	Yes
Unit Dimensions	27" H x 32" W x 30" D (cm: 68.6 x 81.3 x 76.2)	Purge Air	20-120 pxi (1.4- 8.3 bar) at 12 SCFM (240l/min)	Data Logging	Yes
Unit Weight	310 lb (141 kg)	Max Operating db	< 80 db at 3'	Remote Operation	Yes
Country of Origin	USA	Included Vessel Holder Assembly	5" Dia.- Adjusts for 2.5" to 5" High Vessels	Power Specifications	
Certifications available	CE, UL, ATEX, IECEx, Class I Div 1, Class II Div 1, CSA, IP65	Included Vessels	Application Specific	Required Voltage	100-120 / 200-240 VAC (50-60 Hz)



Propellants

### ResonantAcoustic® Mixing (RAM) Product Line Features

LabRAM II H™ performance extends across the RAM product line, enabling new product development and break-through results not possible with traditional mixing methods. All RAM products use low frequency acoustic mixing at up to 100 g of acceleration for intense but low-shear mixing resulting in:



Pyrotechnics



Munitions



RAM 55 H



RAM 5 H



OmniRAM H



LabRAM II H

- 10 - 100x faster processing
- Highly reliable repeatability
- Direct scaling from laboratory to production without increases in processing time
- Capacities for:
  - LabRAM H II™ 2.2 lb/1 kg
  - OmniRAM H™ 11 lb/5 kg
  - RAM 5 H™ 80 lb/36 kg
  - RAM 55 H™ 920 lb/417 kg
- Exceptional ingredient distribution
- Hazardous material compatible options

Witness RAM Technology first-hand with YOUR materials. Arrange a FREE RAM demonstration and mixing test at your facility.  
406-497-5333  
info@resodynmixers.com