

# Innovative Mixing Solutions

# OmniRAM H<sup>™</sup>



how you think about mixing and processing



## The Energetics Industry Standard

Specifically designed for mixing hazardous and energetic materials, government and defense customers rely on ResonantAcoustic<sup>®</sup> Mixers' (RAM) technology for safe, high quality, low-cost processing of energetic and hazardous materials. The **OmniRAM H<sup>™</sup>** delivers better results, improved efficiency, and new product opportunities at a larger payload capacity. Each **OmniRAM H<sup>™</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 and other standards.

## Key Processing Capabilities

- Mixing and processing up to 11 lb (5 kg)
- Any combination of solids and powders from nano-scale and up, liquids and gasses, and viscous and slurry materials
- Coating, milling, grinding, spray coating capabilities
- On-board control of processing accessories
- Mixing vessel temperature control from 194°F (90°C) heating to 15.8°F (-9°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
- Compatible with Resodyn Continuous Acoustic Mixing technology\*

## Features of the **OmniRAM H<sup>™</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
- Laptop-based human machine interface (HMI)\*
- Modular, slide-out service units for processing accessories
- 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





## Global Mixing and Processing Technology

Since its introduction to the marketplace in 2005, 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	OmniRAM™ H	Maximum Payload Capacity	11 lb (5 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	Batch or Continuous Mixing of Hazardous Materials	Max Vessel Acceleration	100g at 60 Hz	Programable Mix Recipe Storage	Yes
Unit Dimensions	42" H x 75" W x 35" D (cm: 106.7 x 190.5 x 88.9)	Purge Air	65 psi 4.482 bars @ 150 SCFM (4246.5 l/min)	Data Logging	Yes
Unit Weight	3,200 lb (1,451.5 kg)	Max Operating db	> 80 db at 3'	Remote Operation	Yes
Country of Origin	USA	Included Vessel Holder Assembly	Application Specific	<b>Power Specifications</b>	
Certifications available	CE, IP65, UL, Class I Div I, Class II Div 1	Included Vessels	Application Specific	Required Voltage	208-240 VAC/1 Phase (50/60 Hz)



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## ResonantAcoustic® Mixing (RAM) Product Line Features

OmniRAM 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:

- 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



RAM 55 H



RAM 5 H



OmniRAM H



LabRAM II H

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