

HORIBA
Automotive Test Systems

ALTITUDE SIMULATION
MEDAS



MEDAS

Altitude Simulation

The MEDAS system is a compact altitude simulator that reproduces a wide range of environmental conditions. It is suited for a variety of testing applications, including durability, RDE replication, emission tests and mapping. MEDAS can be used for tests from component to vehicle level. The patented technology inside the MEDAS allows dynamic changes on the simulated atmosphere with high accuracy. Additionally, the system can be moved between different test cells due to its compact design.



FEATURES

- » Suitable for different test cell configurations (e. g. engine, vehicle, powertrain)
- » Full integration with test cell control through CAN
- » Two MEDAS systems can be coupled in parallel to multiply the mass flow
- » No limit on minimum engine flow rate
- » Additional options available, e. g. noise insulation

KEY BENEFITS

From the Road to the Laboratory

The MEDAS system increases flexibility by offering a modular design, which can be adjusted for a wide range of different test environments and possible applications. It allows any worldwide atmospheric condition to be reproduced inside the test cell. For a complete real driving correlation, an integration with other testing equipment is possible.



FLEXIBLE

- » Flexible concept with extended temperature and humidity modules
- » Can be moved between different test cells
- » Suitable for a range of applications



DYNAMIC

- » Can simulate changing ambient pressure, temperature and humidity
- » Very fast response time for replication of real driving tests



EFFICIENT

- » Precise and repeatable, even during high engine dynamics
- » Patented design and internal algorithms reduce power requirements

SPECIFICATIONS

System	Mass flow [kg/h]	Pressure		Temperature	Humidity	Δp area [m]
		Vacuum	Overpressure			
MEDAS-5012 V	1,200	●	○	Limited	○	700
MEDAS-5012 VO	1,200	●	●	Limited	○	700
MEDAS-5015 V	1,500	●	○	Limited	○	350
MEDAS-5015 VO	1,500	●	●	Limited	○	350
MEDAS + MTM ST	900/1,200/1,500	●	●	●	Limited	None
MEDAS + MTM HU + MHM	900/1,200/1,500	●	●	●	●	None

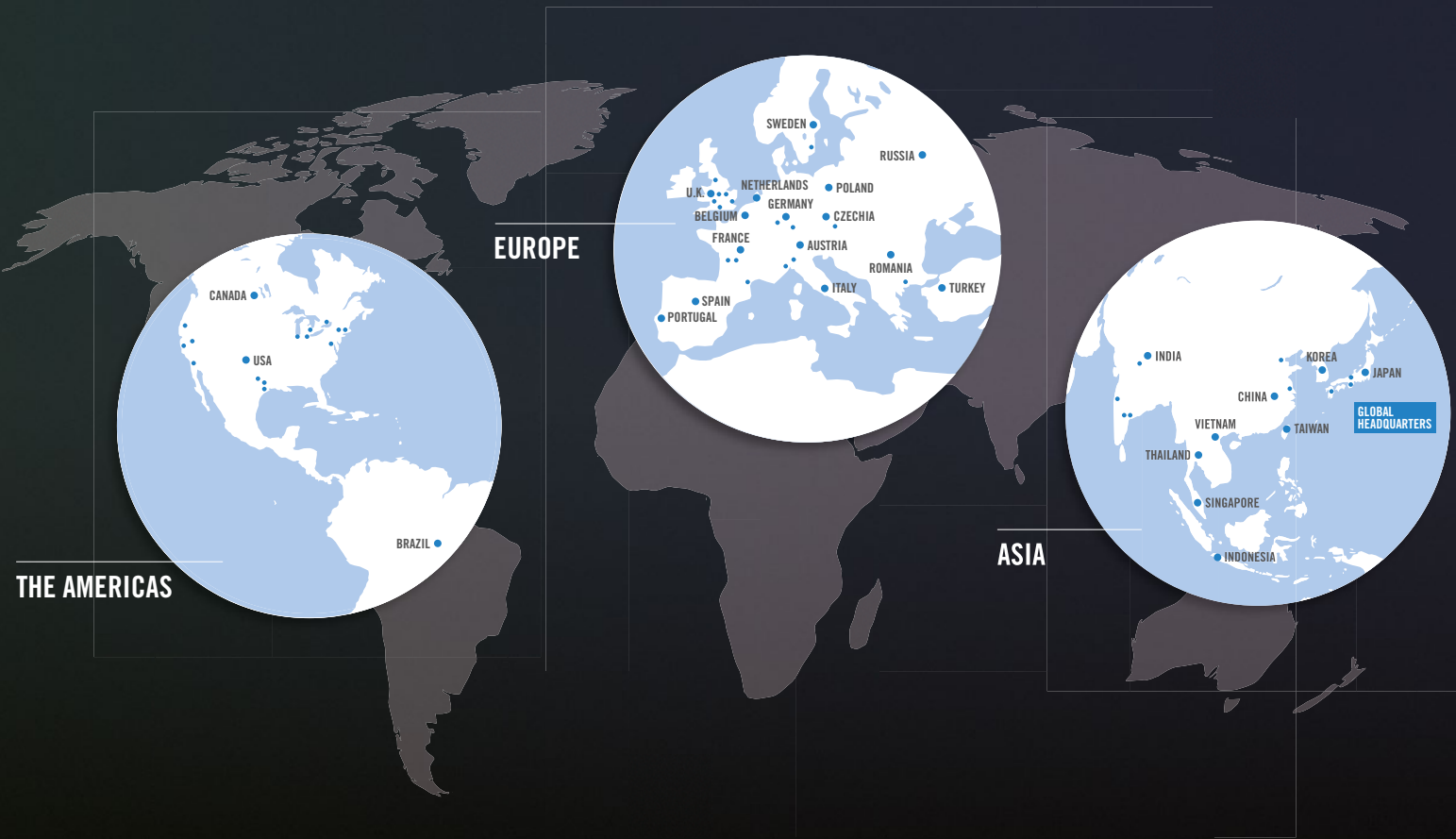
System available in sizes from 2,050x1,150x1,645 to 2,800x1,150x1,645 mm (LxWxH), excluding temperature and humidity modules

THE HORIBA GLOBAL NETWORK

ASIA
 HORIBA Ltd.
 2 Miyahohigashi
 Kisshoin Minami-ku
 Kyoto, Japan
 info@horiba.co.jp

EUROPE
 HORIBA Europe GmbH
 Hans-Mess-Straße 6
 61440 Oberursel
 Germany
 info.he@horiba.com

THE AMERICAS
 HORIBA Instruments Inc.
 5900 Hines Drive
 Ann Arbor, MI 48108
 USA
 sales-ats.us@horiba.com



THE AMERICAS

EUROPE

ASIA



(1) HORIBA continues contributing to the preservation of the global environment through analysis and measuring technology. (2) The contents of this brochure are subject to change without prior notice, and without any subsequent liability to this company. It is strictly forbidden to copy the content of this brochure in part or in full. All brand names, product names and service names in this brochure are trademarks or registered trademarks of their respective companies. (3) HE-B-MED-USA-19-V1

WWW.HORIBA.COM