

GMRV Exhaust Sample Chiller

Inspired by customer feedback for better sample system preparation and treatment in the ICE industry, GlobalMRV is proud to introduce the GMRV Chiller. The GMRV Chiller combines years of experience — and lessons learned in size reduction — into one of the most complex and flexible PEMS sample preparations devices introduced in decades.

The Chiller is affordable, flexible, and compact, and it can be used with other PEMS, iPEMS, or mini-PEMS.

GlobalMRV offers innovative data acquisition systems that monitor real-driving emissions (RDE) and vehicle performance for the automotive and transportation industries. At GlobalMRV, our approach is driven by our belief that comprehensive performance and emissions data — collected from large samples in real-time — transforms how data can be used to drive improvements in development, innovation, and quality.

Our goal is to advance the digital transformation of vehicle powertrain development by using advanced data capture and analytics technology that is flexible, robust, lightweight, and easy to use.

Utilizing the Exhaust Sample Chiller from GlobalMRV, businesses can eliminate the condensation needed to obtain an accurate exhaust sample. The exhaust sample is chilled to create a uniform exhaust sample, thereby eliminating inaccuracies in particulate matter and particle number count.

The exhaust sample chiller can be used in conjunction with many of our products, including AxionR/S, AxionR/S+PM, Firefly, and PEMS Cart.

+PM/PN Module: Particulate Matter (PM) and Particle Number (PN) are measured utilizing the process of a laser light scattering technique. A fully integrated PM and PN module can easily fit into the pathway of the Exhaust Sample Chiller.

Dimensions: 12"H x 8"D x 11"W (305 mm x 203mm x 279mm)

Weight: 20 lbs. (9 kg)

Power: 12 to 14 VDC

Amperage: 12 amperes (4-13 amps per hour)

Sample Flow (Volume): Variable Based on Need (IN)

Optimal Instrument Conditions: 5°C to 50°C (40°F to 122°F)



"We've been able to collect large amounts of data from a bunch of different sources in any weather condition with no difficulties and no downtime."
— Mohammed



Applicable Operational Engines: GMRV equipment has been successfully utilized in the operation of lawn equipment, motorcycles, ATVs, passenger vehicles, trucks, construction equipment, marine vessels, semi-trucks, and locomotives operating in real-world driving conditions.

Online, phone, and email support are included in the warranty with the purchase of every Exhaust Sample Chiller.

Global MRV Compatibility Matrix	
Axion R/S	Yes
Axion R/S+	Yes
Axion R/S+ NH3	Yes
Axion GO	Yes
Backpack	No
Firefly	Yes
Rack or Cabinet	Yes

