



VEHICLE & PRODUCT SOLUTIONS

S-E-A's Vehicle Dynamics group has developed a **Light Vehicle Dynamometer**, which is capable of evaluating a wide range of vehicle configurations and speeds. Doing so without a rider and in a laboratory setting allows S-E-A to provide the most controlled, safe, and repeatable analysis.

Configurations have been developed to:

- Manually add rider ballast or automatically provide rider loading via actuators
- Simulate road load via flywheel inertia and/or via electronic braking systems
- Measure speed, acceleration, temperature, voltage, and current
- Provide pedal and/or throttle inputs

KEY FEATURES

- The vertical spar(s) on the machine allow for loading of the vehicle under test over the seat, footpads, or other user-loading point of the vehicle.
- Throttle control is available for vehicles with tilting footpads, as well as a throttle control add-on which allows for control of thumb-levers, twist grips, and other throttle mechanisms.
- An easy-to-use GUI communicates with the real time hardware to perform data collection, provide a controls interface, and evaluate data.

LIGHT VEHICLE DYNAMOMETER

Vehicle testing for: E-BIKES, ATVS, E-SCOOTERS, HOVERBOARDS, SKATEBOARDS, UNICYCLES...and more!



Modular Version Shown

SPECIFICATIONS

Dimensions (vary by unit)	57" (L) x 37" (W) x 80" (H), Rollers = 16" W
Categories of Devices (vary by unit)	Youth ATV, Stand-Up Electric Scooter, Electric Bicycle, Hoverboard, Electric Unicycle, Electric Skateboard
Device Detail	Wheel Sizes up to 30" Diameter
Measurements	Wheel Speed, Torque, Power, Voltage, Current, Temperature, and more
Maximum Speed (vary by unit)	45 mph
Simulated Rider Load	50 - 450 lb. (variable)
Simulated Road Load	50 - 450 lb. (variable)
Other Features	E-Stop, Windows 11 Computer, Operator Control via GUI

To schedule a demo or request more information:

VPS@SEALimited.com



SEE THE DYNO IN ACTION!

(Please see page 2 for more info.)

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YOUTH ATVS



STAND-UP
ELECTRIC
SCOOTERS



ELECTRIC
BICYCLES



ELECTRIC
SKATEBOARDS



ELECTRIC
UNICYCLES



SEGWAYS

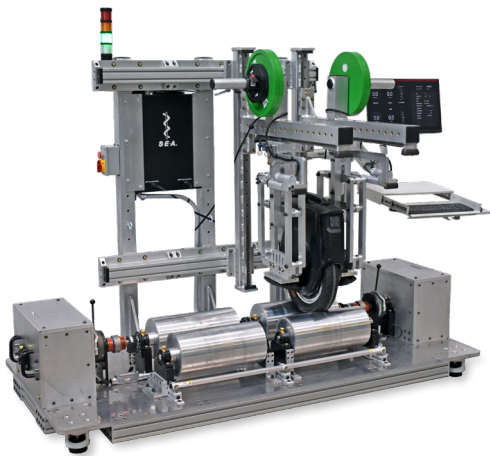


HOVERBOARDS



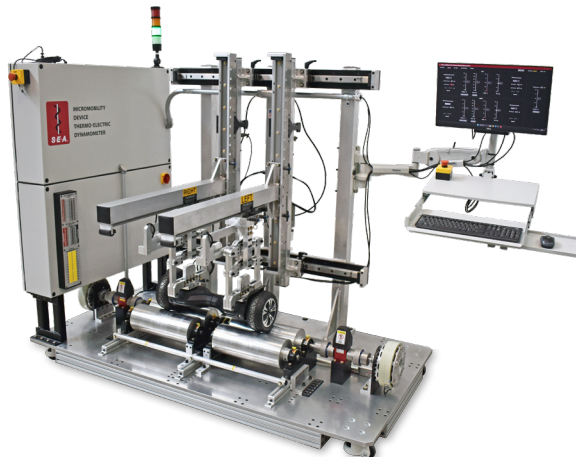
MODULAR VERSION

- Lowest price point
- Combine modules for 2WD or 4WD vehicles
- Speed, torque, power, and more
- Acceleration/deceleration



FULLY MECHANICAL VERSION

- Top speed
- Acceleration/deceleration
- Distance traveled



FULLY AUTOMATED VERSION

- Automated rider loading
- Automated/controllable load for electrical system testing