

HORIBA
Automotive Test Systems

SOLUTIONS FOR E-MOBILITY POWERTRAIN
AND VEHICLE TESTING

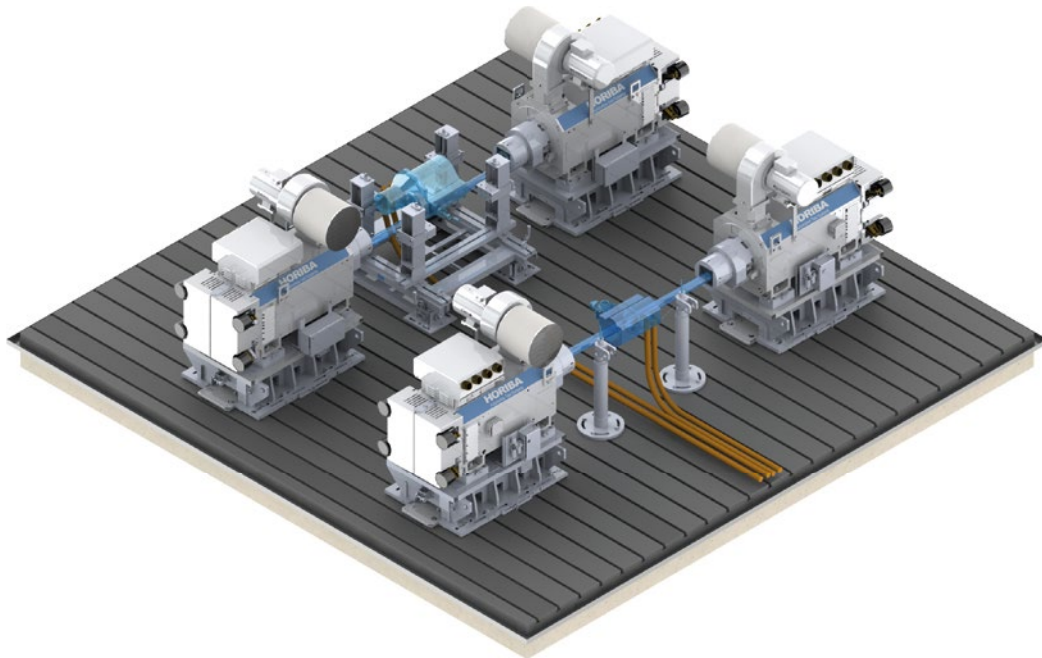
TITAN ePOWERTRAIN



TITAN ePowertrain

The E-mobility Solution

The TITAN ePowertrain is an extension of the modular based TITAN Powertrain series. It is specifically designed to support the testing of E-mobility powertrains with a variety of degrees of electrification. Whether a BEV (battery electric vehicle) with no internal combustion engine (ICE), hybrid powertrains, or driveline components, this system covers state of the art test applications for the ground vehicle market in LD (light-duty), MD (medium-duty) and HD (heavy-duty), for on-road or off-road vehicles.



FEATURES

- » DC Supply up to 1,200 V, 1,400 A
- » Embedded simulation tools like Virtual Battery, Virtual Engine or Vehicle RLS (Road Load Simulation)
- » Integrated instrumentation for emissions, efficiency, power management, analog and digital IO and vehicle data buses
- » High performance dynamometer systems for testing at boundary conditions
- » Fully integrated test suites
- » Open interface for external simulations (HILS), and replications test methods



KEY BENEFITS

Made for Testing E-mobility

The TITAN ePowertrain guarantees future-proof testing equipment. The modular design offers a wide range of extensions and additional modules. A prime mover module from the Virtual Engine portfolio can be added. Likewise, the specially designed, ultra-low inertia wheel dynamometer extends the testing regime to zero speed at maximum torque, peak torque impacts, wheel spin, and resonance reproduction.



FLEXIBLE

- » Modular design
- » Variable powertrain and vehicle configuration
- » Quick and easy customization of dynamometer configurations, DC power and simulation modules
- » Spindle or free-wheeling hub wheel & tire assembly for connection to driveline or vehicle



FOCUSED

- » Natural frequency simulation by HORIBA patented wheel slip technology
- » Field measured load replication (curb impact and hill start)
- » Applications for electrified powertrain testing



INTEGRATED

- » Powerful tools like battery or wheel slip simulation integrated in the controller SPARC^{PT}
- » Seamless integration of a wide range of HORIBA's product portfolio
- » Standard interfaces to 3rd party equipment or simulation software

SPECIFICATIONS *

		DYNAS ₃ -Series		DYNAS _{PM} -Series	
		WM3200LI	WM4200LI	WM3000ULI	WM4000ULI
TORQUE / OVERLOAD	[Nm]	3,200 / 4,800	4,200 / 5,000	3,000 / 5,000	4,000 / 5,000
POWER	[kW]	220 / 330	290 / 348	340 / 544	420 / 530
SPEED	[rpm]	640	660	1,020	810
SPEED	[rpm]	3,200	4,200	3,000	3,000
INERTIA	[kgm ²]	3.5	4.3	0.85	1.1

Battery Simulation: One or Two Channel Distribution

POWER	[kW]	250	350	500	1,000
VOLTAGE	[V]	20 – 600	20 – 800	20 – 1,000	20 – 1,200
CURRENT	[A]	500	700	1,000	1,400

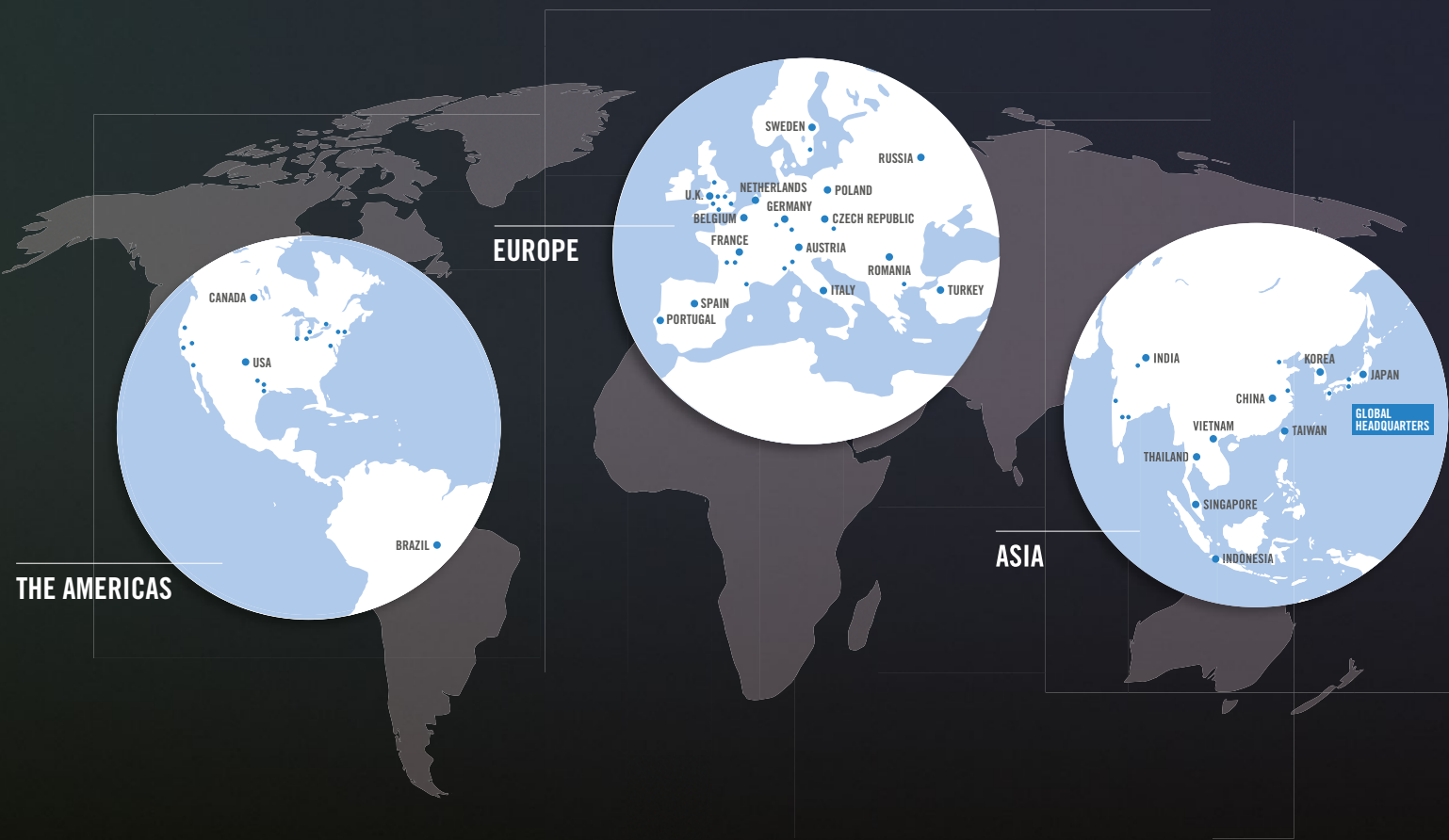
* Technical specifications are subject to change.

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