Plant Model Subscription
Physical Model Hub

Immediate access to practical vehicle plant models for xHILS at a reasonable price

1 Issues

The scale of simulation has expanded to include the whole vehicle as MBD is increasingly adopted.

In-house development of all the component plant models of a vehicle is difficult due to limited time and resources.

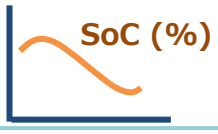
2 Solutions

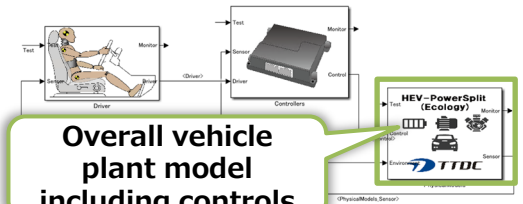
TTDC provides vehicle plant models, helping to create simulation environments for the whole vehicle **efficiently** and **at low cost** without having to develop peripheral models outside your development targets! !

Product characteristics

- Realistic model configuration (Simscape™)
- Application-based product lineup

Power consumption performance/
dynamic performance





Overall vehicle plant model including controls

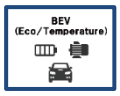
Product lineup

Overall vehicle system model

HEV
power consumption and fuel consumption simulations

Split type
- *power split device*
- *clutch*
- *Series type*

BEV
power consumption and thermal simulations



- *Battery EVs*

Auto Driving BEV
auto driving simulations

- *Battery EVs*

Can also be used as educational model

Individual unit models	
Engines	Inline 3-cylinder NA cyclic engine model
	Inline 4-cylinder NA cyclic engine model (planned)
Transmissions	6-speed AT model
	4-speed AT model (planned)
Motors	Simple electric motor model Brush DC motor model (planned)
Battery	Battery equivalent circuit model
Vehicle	Simple 3-axis 6 degrees of freedom vehicle model

Click here for details: https://physical-model.ttsystems.com

4 Contact

Physical Model Hub contact: Software Technology Development Div.
Email: TTDC_PhysicalModelingTeam@ml.toyota-td.jp