



# DATASPEED KINETIC KITS

AUTONOMOUS R&D  
VEHICLE PACKAGES

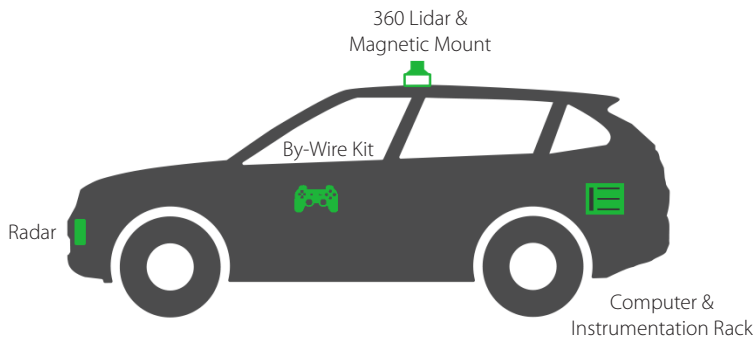
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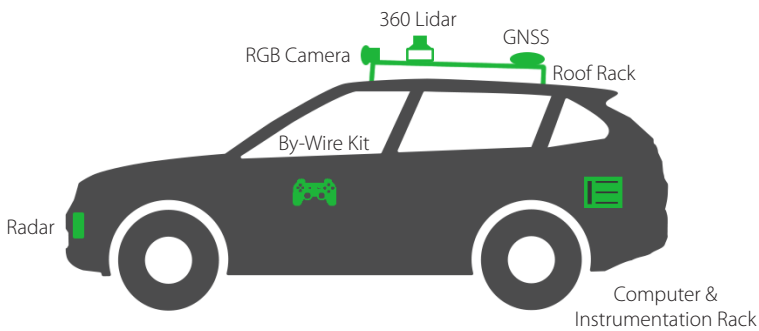
# Dataspeed Kinetic Kits

These innovative starter packages offer educational institutions and small companies with reliable, flexible platforms that feature industry-leading hardware and software for autonomous vehicle (AV) research and development. With the influx of driverless technology providers over recent years, it is often overwhelming for teams to navigate the seemingly endless options. Dataspeed Kinetic Kits were developed to streamline the AV hardware and software selection process to allow teams to focus their efforts on their own research and testing. Every component was hand-selected by the experienced Dataspeed engineering team based on extensive industry knowledge and experience. Included software functionality was developed in-house to allow for project adaptability and expandability.



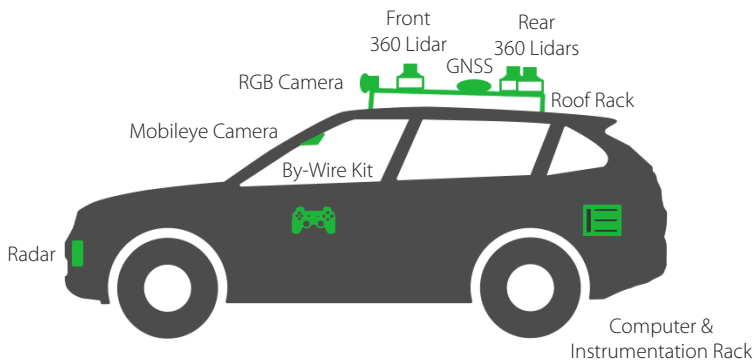
## Kinetic Starter Kit For Essential Data & Control

The Kinetic Starter Kit outfits production vehicles with the fundamental technologies to begin collecting data and developing essential autonomous functionality. It's ideal for universities and startup teams just beginning research and testing.



## Kinetic Intermediate Kit For Path Following & Object Avoidance

The Kinetic Intermediate Kit retrofits production vehicles with a sensor suite needed to successfully record and playback a manually driven route or to follow waypoint inputs. Additionally, it has the capability to detect and stop for objects. It's ideal for teams looking to test within predetermined areas or for performing technology demonstrations.



## Kinetic Advanced Kit For Highway Driving

The Kinetic Advanced Kit provides out-of-the-box automated highway driving functionality including Lane Keeping, Adaptive Cruise Control, and Automated Lane Change. This package is utilized with a full suite of sensors to allow engineering teams to build upon their autonomous research and testing.

Kinetic Kit Packages	Starter	Intermediate	Advanced
<b>Hardware</b>			
Dataspeed By-Wire System	X	X	X
Ouster OS1-32 Lidar (1 unit) / Advanced (2 units)	X	X	X
Ouster OS1-64 Lidar (1 unit)			X
Long Range Radar (1 unit)	X	X	X
LUCID Vision Labs RGB Camera (1 unit)		X	X
OxTS INS (1 unit with dual antennas)		X	X
Mobileye Camera (1 unit)			X
Neousys Computing Platform (1 unit)	X	X	X
Sensor Mounting & Storage Systems	X	X	X
Hardware compatible for use with Autoware		X	X
<b>Software</b>			
Turnkey Development Environment for ROS 1 and ROS 2	X	X	X
Sensor Calibration Tool	X	X	X
Sensor Fusion Module	X	X	X
Lidar & Radar Object Tracking	X	X	X
Object Detection & Avoidance		X	X
Recorded Path & Waypoint Following		X	X
Lane Keeping & Lane Change			X
Adaptive Cruise Control			X
<b>Engineering Services</b>			
Mechanical & Electrical Integration	X	X	X
Sensor Calibration	X	X	X
Initial Training & Support	X	X	X

## Optional Add-Ons For Enhanced Performance

### Sensor Mounting Options

- › Bumper Bars
- › Custom Mounting Solutions

### Sensors

- › Infrared Cameras
- › Solid State Lidars
- › Ultrasonic Sensors

### Data Solutions

- › Quantum Data Storage with Swappable Drives

### Remote Operation & Emergency Stop

- › FORT Robotics Remote System

### Power

- › Shore Power System
- › Secondary Batteries
- › DC Power Conversion System

### Engineering Services

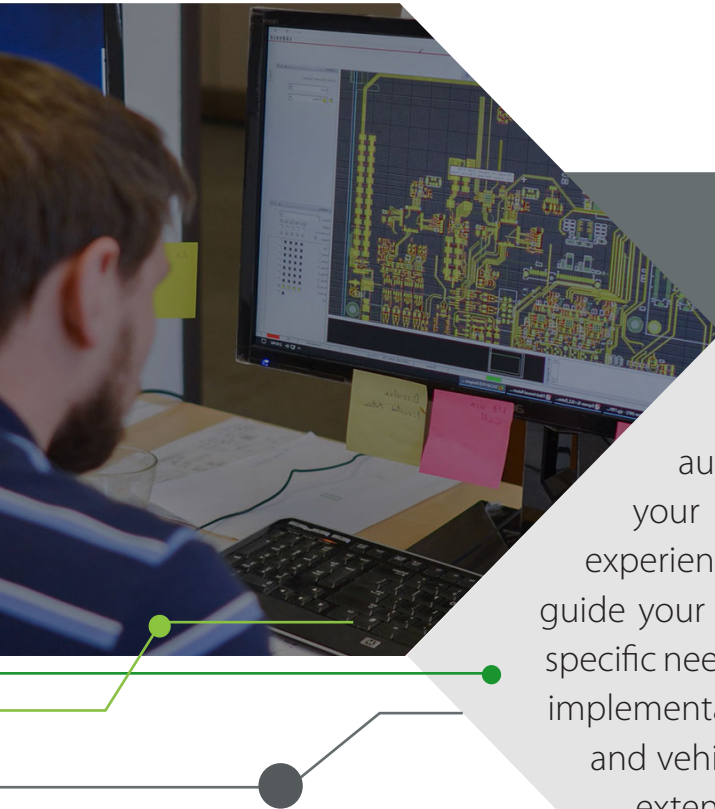
- › Custom Integrations
- › Sensor Perception Coverage Mapping
- › TUV Approval Support and Consulting



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## Partner with Dataspeed

Whether your company is just getting started in the autonomous vehicle (AV) industry or is looking to scale your vehicle fleet, Dataspeed has the solution for you. Our experienced team of engineers and business professionals can guide your organization in developing an action plan to meet your specific needs. We're skilled in full vehicle integration including by-wire implementation, sensor and computer installation, data acquisition, and vehicle communications. Our vehicle systems engineers have extensive experience creating custom hardware and software solutions. Contact us today to discuss how Dataspeed can accelerate your AV research and development.

