

# What is a “Level 4” Autonomous Vehicle?

## Society of Automotive Engineers’ Levels of Vehicle Automation

SAE Level and Name	Definition	Steering and Acceleration	Monitoring of Driving Environment	Dynamic Driving*	System Capability
<b>Level 0</b> No Automation	Full-time performance by the human driver of all aspects of dynamic driving	Human driver	Human driver	Human driver	n/a
<b>Level 1</b> Driver Assistance	Execution of either acceleration or steering by a system with the expectation that the human driver will perform all remaining aspects of dynamic driving	Human driver and system	Human driver	Human driver	Some driving conditions
<b>Level 2</b> Partial Automation	Execution of one or more driver assistance systems with the expectation that the human driver will perform all remaining aspects of dynamic driving	<b>System</b>	Human driver	Human driver	Some driving conditions
<b>Level 3</b> Conditional Automation	Automated driving system performs all aspects of dynamic driving with the expectation that the human driver will respond appropriately to a request to intervene	System	<b>System</b>	Human driver	Some driving conditions
<b>Level 4</b> High Automation	Automated driving system performs all aspects of dynamic driving under most driving conditions	System	System	<b>System</b>	Some driving conditions
<b>Level 5</b> Full Automation	Full-time performance by an automated driving system of all aspects of dynamic driving under all roadway/environmental conditions	System	System	System	<b>All driving conditions</b>

\*Dynamic driving consists of operational and tactical aspects of driving (changing lanes, using signals) but not the strategic aspects (waypoints/destination finding).

Source: SAE International, “Automated Driving – Levels of Driving Automation,” January 2014.