ID	Feature	Description	Manufacturer	Availability Year	Vehicle Types	Accurate Use Cases	Notes
1	Adaptive Cruise Control	Automatically adjusts the vehicle speed to maintain a safe distance from vehicles ahead.	Toyota	2000	Cars, SUVs	drives, stop-	Uses radar and cameras to monitor traffic.
2	Automatic Emergency Braking	Detects an impending collision and applies the brakes if the driver fails to respond.	Ford	2013	Cars, Trucks	Urban driving, busy intersections	Can significantly reduce crash severity.
3	Lane Keeping Assist	Helps the driver stay in their lane by providing steering assistance.	BMW	2015	Cars	Highway driving, winding roads	Works best on well-marked roads.
4	Blind Spot Monitoring	Alerts the driver of vehicles in the blind spot when changing lanes.	Honda	2013	Cars, SUVs	Highway driving, merging	Some systems may provide steering assist.
5	Parking Assistance	Guides the vehicle into a parking spot, either parallel or perpendicular.	Mercedes- Benz	2009	Cars, SUVs		May also include front and rear sensors.
6	Cross Traffic Alert	Warns of oncoming traffic when reversing out of parking spaces.	Audi	2014	Cars, SUVs	Reversing out of parking spaces	Uses sensors to detect vehicles.
7	Traffic Sign Recognition	Identifies and displays road signs to the driver.	Volkswagen	2012	Cars, SUVs	Urban driving	Helps maintain speed limits.
8	Forward Collision Warning	Warns the driver of an imminent collision ahead.	Chevrolet	2013	Cars, SUVs, Trucks	City driving, highway driving	Often paired with emergency braking.
9	Adaptive Headlights	Adjusts headlight direction based on speed and steering angle.	Lexus	2008	Cars	Night driving, winding roads	Improves visibility around curves.
10	Automatic High Beams	Automatically switches between high and low beams based on oncoming traffic.	Subaru	2015	Cars	Night driving	Enhances safety without manual adjustment.
11	Lane Departure Warning	Alerts the driver when unintentionally drifting out of their lane.	Nissan	2017	Cars, SUVs	Highway driving, long trips	Can work with or without lane keep assist.
12	Collision Avoidance System	Uses data from multiple sensors to predict and prevent collisions.	Tesla	2015	Cars	Urban driving, highway driving	Highly advanced systems in newer models.
13	Safety Exit Assist	Alerts passengers of oncoming traffic before opening doors.	Volvo	2019	Cars, SUVs	Urban driving, parked situations	Enhances passenger safety.
14	Emergency Evasive Steering	Provides assistance to steer away from obstacles during emergency situations.	Mazda	2019	Cars, SUVs	Highway driving, urban driving	A dynamic steering aid.
15	Pedestrian Detection	Detects pedestrians in the vehicle's path and warns or stops the vehicle.	Hyundai	2018	Cars, SUVs	City driving	Can minimize accidents with pedestrians.
16	Surround View Camera	Provides a bird's-eye view of the vehicle's surroundings to assist in parking.	Kia	2016	Cars, SUVs	Parking in tight spaces	Helps eliminate blind spots while parking.

17	Traffic Jam Assist	Automatically controls acceleration and braking in heavy traffic.	BMW	2019	Cars, SUVs	Stop-and-go conditions	Combines adaptive cruise control with lane keeping.
18	Tire Pressure Monitoring System (TPMS)	Monitors air pressure in the tires to improve safety and efficiency.	Ford	2007	Cars, SUVs, Trucks	Every drive	Helps prevent tire blowouts.
19	Vehicle Stability Control	Helps prevent skidding and loss of control during sudden maneuvers.	Honda	711111	Cars, SUVs, Trucks	Variable driving conditions	Integrated with anti-lock braking systems.
20	Hill Start Assist	Prevents rolling backward on inclines when starting to drive.	Toyota	2008	Cars, SUVs	Hilly areas, stoplights on inclines	Automatic engagement when stopping.
21	Child Safety Locks	Prevent the rear doors from being opened from the inside.	Chevrolet	1990	Cars,SUVs	Family driving	Essential for child safety.
22	Adaptive Suspension Systems	Adjusts the vehicle's suspension for optimal handling and comfort.	Audi	2014	Cars	Varied road conditions	Improves ride quality during dynamic driving.
23	Stray Vehicle Detection	Detects if the vehicle is approaching a lane change without signaling and alerts the driver.	Mercedes- Benz	2019	Cars,SUVs	Highway driving	Enhances lane changing awareness.
24	All-Wheel Drive (AWD) Monitoring	Improves traction by distributing power to all wheels based on road conditions.	Subaru	2010	SUVs,Crossovers		Enhances stability in adverse conditions.
25	Voice Recognition Technology	Allows the driver to operate systems using voice commands.	Ford	2015	Cars, SUVs	Dynamic driving, hands-free operation	Aids driver focus on the road.
26	Night Vision System	Uses infrared cameras to detect pedestrians and animals at night.	BMW	2005	Luxury Cars	Night driving	Significantly increases visibility.
27	Reverse Auto Braking	Automatically applies brakes during reversing if an obstacle is detected.	Toyota	2016	Cars,SUVs	Parking maneuvers	Helps prevent accidents while reversing.
28	Driver Attention Alert	Monitors driver behavior and suggests breaks if signs of fatigue are detected.	Audi	2018	Cars,SUVs	Long trips	Promotes safe driving practices.
29	Intelligent Speed Assistance	Calculates speed limits and warns drivers when they exceed them.	Volvo	2019	Cars,SUVs	Urban, suburban driving	Can be less intrusive with driver adjustment.
30	Blind Spot Camera	Shows a live feed of the blind spot on the dashboard or rearview mirror.	Ford	2020	Cars,SUVs	Merging and changing lanes	Helps reduce blind spot accidents.
31	Automatic Parking Braking	Applies brakes automatically if a potential collision is detected while parking.	Hyundai	2019	Cars,SUVs	Parking in tight spots	Works with parking assist features.
32	Radar Cruise Control	Maintains speed and distance from the vehicle ahead using radar.	Mercedes- Benz	2007	Cars,SUVs	Long highway drives	Adaptive to traffic changes.
33	Robust Driver Monitoring System	Utilizes face and eye tracking technology to monitor driver alertness.	Nissan	2020	Cars,SUVs	Long-distance travel	Works to prevent accidents due to

							inattentiveness.
34	Active Lane Change Assist	Provides steering assistance to change lanes safely.	Tesla	2021	Cars,SUVs	Highway driving	Dependent on clear lane conditions.
35	Load Management Systems	Distributes vehicle's weight dynamically for enhanced control.	Ford	2018	Trucks	Heavy loads	Aids stability while driving with loads.
36	Emergency Lane Keeping Assist	Helps the driver steer back into the lane if drifted without signaling. Provides a	Toyota	2020	Cars,SUVs	Highway	Additional safety feature for erratic movements.
37	360-Degree Camera Views	comprehensive view	Porsche	2019	Cars,SUVs	Narrow streets,Parked situations"	Eliminates blind spots during parking.
38	Connected Vehicle Technology	Enables communication between vehicles to improve safety and traffic efficiency.	GM	2020	All vehicles	Traffic scenarios	Assists in collision avoidance.
39	Adaptive Emergency Braking	Adjusts braking power based on the collision risk and driver response.	Honda	2021	Cars,SUVs	Busy intersections	Improves passenger safety.
40	Smart Traction Control	Handles changing traction conditions automatically to enhance stability.	Nissan	2015	Cars,SUVs	Rain, snow, mud	Aids in maintaining control.
41	Acoustic Vehicle Alerting System (AVAS)	Provides sound alerts for electric and	Toyota	2020	Electric Vehicles	City driving	To meet regulations for silent vehicles.
42	Towing Assistance Systems	Assists with the safe towing of trailers, providing guidelines and warnings.	Chevrolet	2018	Trucks	Towing situations	Facilitates safe handling during towing.
43	Clarity/Clarity Plus Charging Hub Connection	Integrates intelligent charging systems for electric vehicles.	BMW	2022	Electric Vehicles	Urban driving	Aids vehicle charging management.
44	Highway Driving Assistant	Offers semi- autonomous features for highway driving scenarios, including steering and speed control.	Mercedes- Benz	2021	Cars,SUVs	Highway driving	Merges adaptive cruise and lane keeping.
45	Remote Start Systems	Allows drivers to start their vehicle remotely to precondition temperatures.	Volkswagen	2015	Cars,SUVs	Cold weather climates	Enhances comfort upon entry.
46	Adaptive Load Control	Automatically adjusts vehicle suspension based on load weight for improved handling.		2021	Trucks	Towing, heavy loads	Ensures optimal performance under dynamic loads.
47	Child Presence Alert	Reminds the driver to check the back seat for child passengers before exiting the vehicle.	Nissan	2020	Cars,SUVs	Family vehicles	Helps prevent child abandonment.
48	Integrated Navigation Assist	Guides the driver with visual and auditory directions to a destination while minimizing distractions.	Ford	2021	Cars,SUVs	Long trips	Enhances route planning.
	Real-Time	Provides updates on traffic conditions and				Daily	Improves travel

49	Traffic Updates	suggests alternative routes.	Volkswagen	2020	Cars,SUVs	commute	efficiency.
50	Seamless Smartphone Integration	Allows for full integration of smartphone functions such as navigation, calls, messages through the vehicle's system.	BMW	2019	Cars,SUVs	Daily driving	Facilitates hands-free control of mobile devices.
51	Easy Entry/Exit Features	comfortable entry and exit from the vehicle.	Toyota	2021	Cars,SUVs	Individuals with mobility issues	Enhances accessibility.
52	Over-the-Air Software Updates	Allows vehicle software to be updated remotely, enhancing performance and features.	Tesla	2018	Electric Vehicles, Cars		Keeps systems up to date without dealer visits.
53	Emergency Roadside Assistance Integration	Provides instant access to roadside assistance services through the vehicle's interface.	GM	2019	Cars,SUVs	Any breakdown situation	Peace of mind for drivers.
54	Integrated Dash-Cam Features	Records video and driving data, providing details in case of an accident.	Hyundai	2020	Cars,SUVs	Insurance claims, safety	Protects both driver and passengers.
55	Vehicle-to-Grid Technology	Enables electric vehicles to send energy back to the grid.	BMW	2022	Electric Vehicles		Encourages renewable energy use.
56	In-Vehicle Health Monitoring	Monitors driver vital signs to detect health emergencies while driving.	Mercedes- Benz	2021	Luxury Cars	Long-distance journeys	Raises alerts if health anomalies are detected.
57	Personalized Driver Profiles	Allows customization of vehicle settings based on individual driver preferences.	Ford	2021	Cars,SUVs	Family vehicles	Enhances convenience for multiple drivers.
58	Proactive Collision Avoidance	Utilizes multiple sensors to anticipate and avoid potential collisions before they occur.	Toyota	2022	Cars,SUVs	Urban driving	Continues improving safety features.
59	Road Condition Feedback Systems	Informs the driver about current road conditions, like icy or wet surfaces.	Audi	2020	Cars,SUVs	Variety of road conditions	Improves driving awareness.
60	Overhead Cabin View Cameras	Provides a bird's-eye view of the vehicle's interior for safety checks.	Kia	2019	SUVs	Child supervision	Ensures child safety while on board.
61	Parking Space Measurement Technology	Measures parking space dimensions to determine if the vehicle can fit.	Honda	2018	Cars,SUVs	Urban driving	Helps with parking decisions.
62	Infrared Night Vision Safety	Allows drivers to see in complete darkness using infrared imaging.	BMW	2022	Luxury Vehicles	Night driving	Significantly increases nighttime safety.
63	Automated Vehicle Maintenance Notifications	Alerts the driver when vehicle maintenance is needed.	Ford	2019	Cars,SUVs	Daily use	Enhanced vehicle monitoring.
64	Cargo Management Systems	Ensures optimal storage and securing of cargo, especially in trucks.	Ram	2020	Trucks	Cargo transportation	Improves loading capabilities.

65	Safety Record Notifications	Informs drivers of potential recalls and safety issues with their vehicle.	Toyota	2021	Cars,SUVs	Any vehicle	Promotes safe ownership.
66	Smart Emergency Response Systems	Connects vehicles with emergency services during accidents for rapid assistance.	Chevrolet	2022	Cars,SUVs	Emergency situations	Supports driver safety.
67	Driver Speed Limiting Features	Allows the owner to	Ford	2020	Cars,SUVs	Teen drivers, family vehicles	Improves safety for new drivers.
68	Integrated Security Features	Utilizes alarms, immobilizers, and tracking systems for vehicle security.	Tesla	2021	Electric Vehicles	Urban environments	Protects against theft.
69	Post-Collision Braking Systems	Prevents further collisions after the vehicle has been in an accident.	Honda	2019	Cars,SUVs	Accident scenarios	Enhances post- impact safety.
70	Vehicle Condition Scanning	Analyzes vehicle conditions to predict potential issues and failures.	Toyota	2022	Cars,SUVs	Daily use	Future preventive maintenance.
71	Real-Time Weather Updates	Provides updates on current weather conditions and warnings during a drive.	Volkswagen	2022	Cars,SUVs	Long trips	Increases situational awareness.
72	Customizable Mood Lighting	Allows personalization of interior lighting for driver comfort.	BMW	2020	Luxury Cars	Night driving	Enhances comfort during drives.
73	In-Car Wi-Fi Connectivity	Provides internet access to passengers while on the road.	Chevrolet	2017	Cars,SUVs	Long trips	Enhances passenger experience.
74	Advanced Airbag Systems	Utilizes multiple airbags strategically placed for optimal protection.	Toyota	2003	Cars	Accident situations	Enhanced passenger safety.
75	Speed Adaptive Headlights	Adjusts based on vehicle speed, improving visibility at various speeds.	Audi	2019	Luxury Cars	Night driving	Increases visibility in turns or curves.
76	Environmental Impact Detection	Monitors emissions and prompts the driver for eco- friendly driving adjustments.	Ford	2020	Electric Vehicles	Daily commutes	Promotes responsible driving.
77	Voice- Activated Navigation and Control	Enables hands-free operation of navigation and vehicle functions via voice.	Nissan	2021	Cars	Every drive	Increases convenience for the driver.
78	Collision Reconstruction Technology	Analyzes crash data to reconstruct accident scenarios for accountability.	Tesla	2021	Cars	Accident reviews	Supports investigations.
79	Mobile App Integration for Vehicle Monitoring	Allows remote condition monitoring and vehicle control through a smartphone app.	Hyundai	2021	Cars,SUVs	Daily life	Improves convenience.
80	Energy Consumption Analysis	Displays real-time energy usage for electric vehicles to optimize efficiency.	BMW	2020	Electric Vehicles	Eco-driving	Supports sustainable practices.
81	Proximity Keyless Entry	Allows entry into the vehicle without using a key, enhancing	Toyota	2012	Cars,SUVs	Daily life	Enhances security and accessibility.

		convenience.					
82	Vehicle Terrain Adaptation	Automatically adjusts vehicle settings based on terrain for optimal performance.	Јеер	2018	SUVs	Off-road situations	Improves handling on rough surfaces.
83	Bicycle Detection Systems	Detects bicycles in proximity while driving, especially at intersections.	Volvo	2019	Cars,SUVs	Urban environments	Enhances safety for cyclists.
84	Dynamic Stability Control	Adjusts vehicle dynamics in real-time for improved handling.	Ford	2021	Cars,SUVs	Varied conditions	Promotes better control of the vehicle.
85	Blind Spot Indicator Systems	Uses vibrant indicators to warn drivers of vehicles in their blind spots.	Chevrolet	2018	Cars,SUVs	Merging and highway situations	Visual alerts enhance safety.
86	Heated/Cooled Seating Technology	Provides temperature adjustments for seats based on driver preferences.		2006	Luxury Cars	Daily driving	Increases passenger comfort.
87	In-Car Entertainment System Integration	Interconnects vehicle systems with entertainment devices for passenger	Kia	2021	SUVs	Family trips	Enhances passenger enjoyment.
88	Onboard Diagnostics Systems	use. Monitors and displays key vehicle diagnostics in real- time.	Hyundai	2001	Cars,SUVs	Preventive maintenance	Promotes proactive vehicle management.
89	Integrated Voice Alerts	Provides timely driving alerts during critical situations in a conversational tone."	Toyota	2022	Cars,SUVs	Every drive	Enhances safety and reduces distractions.
90	Automatic Gear Control Systems	Automatically selects the ideal gear based on driving conditions.	Chevrolet	2017	Cars,SUVs	City driving	Enhances fuel efficiency and handling.
91	Traffic Flow Management Systems	Monitors and adjusts driving patterns based on traffic conditions and flow.	Mercedes- Benz	2021	Cars,SUVs	Highway driving	Intelligent traffic adaptation.
94	Smartphone- Based Vehicle Control Features	Allows vehicle controls via smartphone applications for convenience.	Hyundai	2021	Cars,SUVs	Daily life	Enhances connectivity and fuel management.
95	Emergency E- Call Services	Automatically dials emergency services in case of serious accidents.	BMW	2015	Cars,SUVs	Critical situations	Supports immediate assistance.
96	Rain Sensing Wipers	Automatically adjust wiper speed based on rain intensity.	Nissan	2014	Cars,SUVs	Variable weather conditions	Enhances visibility.
97	Audiovisual Proximity Notifications	Provides alerts through visual/audio cues for nearby hazards.	Subaru	2019	Cars,SUVs	Parking situations	Increases situational awareness.
98	Driver's License Scanner	Reads driver's licenses for verification purposes in car-sharing environments.	GM	2021	Cars,SUVs	Car-sharing	Enhances security measures.
102	High- Presolution Dashboards	Provides detailed vehicle data displays in high resolution for ease of reading.	Tesla	2021	Luxury Cars	Every drive	Increases driver awareness.
103	Dynamic Air Filtration Systems	Adjusts indoor air quality based on outside conditions.	Toyota	2020	Cars,SUVs	Urban scenarios	Enhances passenger comfort.
	Automatic	Maximizes energy					Promotes

104 Energy Recycling Systems	efficiency by recycling vehicle energy use.	BMW	2021	Electric Vehicles	Long commutes	sustainable practices.
Facial 105 Recognition Technology	Monitors driver identity and alerts for unauthorized attempts to start the vehicle.	Nissan	2022	Luxury Cars	Every drive	Enhances security.
Vehicle 106 Information Display System	Shows relevant information about driving conditions and vehicle status on the dashboard.	Ford	2021	Cars,SUVs	Every drive	Improves driver awareness.
Seamless 107 Recovery of Control Systems	Automatically takes control if driver inputs are risky or distracted.	Chevrolet	2022	Cars,SUVs	Highway driving	Mitigates potential accidents.
Lidar-Based 108 Navigation Systems	Uses Lidar technology for precise navigation and mapping.	Audi	2021	Luxury Cars	Urban driving	Supports autonomous driving systems.
Shared 109 Mobility Integration	Supports various ride-sharing services directly through the vehicle's UI.	Kia	2022	Cars,SUVs	Shared driving	Promotes futuristic mobility solutions.
Weight 110 Monitoring for Passengers	Identifies the number of passengers and their weights for optimal safety measures.	Ford	2021	Cars,SUVs	Every drive	Ensures safer transport conditions.
Anti-Theft 111 Recovery Technology	Integrates location tracking for stolen vehicles to help recover them.	Tesla	2021	Electric Vehicles	Urban environments	Enhances theft prevention measures.
Virtual Reality 112 Training Systems	Utilize VR technology for driver training and preparation.	Mercedes- Benz	2022	Luxury Cars	Training environments	Innovative driving education.
Adaptive Front 115 Lighting Systems	Automatically adjusts headlight patterns based on steering and vehicle speed.	BMW	2022	Luxury Cars	Night drives	Increases safety during night drives.
Biometric 116 Vehicle Access Systems	Utilizes finger prints for authorized vehicle access.	Tesla	2021	Luxury Cars	Urban commuting	Enhances security.
Predictive 117 Maintenance Alerts	Computes data to alert drivers about potential future vehicle problems.	Hyundai	2021	Cars,SUVs	Everyday use	Improves vehicle longevity.
Traffic 118 Violation Alert Systems	Notifies drivers of traffic violations based on location and congestion.	GM	2022	Cars,SUVs	Urban driving	Promotes law- abiding behavior.
Self-healing 119 Exterior Materials	Utilizes materials that repair surface damage automatically.	Tesla	2022	Luxury Cars	Every driving environment	Enhances aesthetics and longevity.
Data-Driven 120 Driving Coaching	Provides real-time feedback and coaching based on driving behavior data.	Toyota	2022	Cars,SUVs	Every drive	Promotes safer driving habits.