



BMW i5
Driving Assistant Professional

2024



ASSISTANCE
COMPETENCE

76%

SAFETY
BACKUP



90%

SPECIFICATIONS

SYSTEM NAME	Driving Assistant Professional
Intended Operation Design Domain	● Highway ● Inter-Urban ✘ Urban

● RECOMMENDED
 ✘ NOT RECOMMENDED

Comments

BMW's appropriately named 'Driving Assistant Professional' accurately portrays system functionality. The promotional material and the handbook correctly indicate the limitations of the system capabilities. System status information is clearly displayed in the driver's direct line of sight by a head-up display. The i5 monitors that the driver's hands are on the steering wheel. The car's direct driver monitoring system is used only to ensure the driver is not incapacitated. The system balances driver steering input with lane guidance, promoting co-operative driving.

The i5 combines map-based speed limit information with real time camera inputs to manage fixed, variable and temporary speed limit signs. However, the system does not adapt speed for upcoming road features such as curves and junctions. The car responds to avoid or mitigate a collision in all of the test scenarios for automatic cruise control. The driver is supported through the S-Bend, staying within the lane at all test speeds. The BMW has a lane change assist feature. In the case of an unresponsive driver, the i5 performs a controlled stop within its lane. If the radar or camera is blocked the i5 provides a timely warning and prevents system activation.

The i5 from BMW balances a high level of Vehicle Assistance with a similar level of Driver Engagement. Combined with excellent safety back-up, the system, overall, offers Very Good highway assistance.

Disclaimer

When using Assisted Driving Systems (also known as SAE Level 2 systems), a driver's responsibilities include monitoring the system's control of speed, braking and steering at all times, strict compliance with traffic rules, and maintaining situational awareness throughout the journey.

Certain situations might negatively influence the system's performance (e.g. poor weather, faded lane markings, construction zones, exiting a tunnel), resulting in a sudden interruption of the lateral and/or longitudinal support (system disengagement). Moreover, the system may fail to detect certain road users such as motorcyclists not directly in front of the vehicle, or stationary objects.

Appropriate fitness to drive is critical for safe travel, even when using Assisted Driving Systems. Visual distraction (e.g. eyes off the road), impairment (e.g. drowsiness, intoxication) as well as unresponsiveness, poses high risks. It is highly recommended to keep your hands on the steering wheel at all times to ensure immediate reaction when the system disengages.

ASSISTANCE COMPETENCE

Total 76%

DRIVER ENGAGEMENT

76.0 / 100 PTS

CONSUMER INFORMATION 23.0 / 25 PTS

System Name	Driving Assistant Professional
Marketing Material	Driving Assistant Professional Viewed 15 October 2024
Quick Start Guide	
Vehicle Handbook	Viewed 15 October 2024

SYSTEM STATUS 25.0 / 25 Pts

Continuous System Status Indicator	
System Status Change Indicator	

DRIVER MONITORING 5.0 / 20 PTS

Hands-on Monitoring	
Direct Driver Monitoring	

DRIVING COLLABORATION 23.0 / 25 Pts

Increase in Steering Torque	
Override response	
System continues to assist while driver steers to avoid obstacle	

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR

ASSISTANCE COMPETENCE

Total 76%

VEHICLE ASSISTANCE

83.0 / 100 PTS

SPEED ASSISTANCE 19.4 / 25 PTS

SPEED ASSIST SYSTEMS

Vehicle response to fixed Speed limits	At speed at sign
Vehicle response to variable Speed limits	At speed at sign

SPEED LIMIT INFORMATION FUNCTION

General requirements	Compliant
Conditional Speed Limits	■
Road Features	■
Local Hazards	■
System Updates	None

ADAPTIVE CRUISE CONTROL PERFORMANCE 28.6 / 40 PTS

SCENARIOS		
Approaching a stationary target	■	■
Approaching a slower moving target	■	■
Approaching a braking target	■	■
Target cutting-in in front	■	■
Car cutting-out in front to expose target	■	■

UNDERTAKE PREVENTION	
Undertake prevention at speeds over 90 km/h	■




ADAPTIVE CRUISE CONTROL AUTO-RESUME	
Assistance maintained after coming to a full stop	■
System assistance maintained by	Automatic resume within 5s of stop and driver input required over 5s

■ GOOD
 ■ ADEQUATE
 ■ MARGINAL
 ■ WEAK
 ■ POOR



 ASSISTANCE COMPETENCE

Total 76%

STEERING ASSISTANCE  35.0 / 35 PTS

SCENARIOS	
80 km/h	 Vehicle stays in lane
100 km/h	 Vehicle stays in lane
120 km/h	 Vehicle stays in lane

Lane Change Assist	
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 FITTED TO THE VEHICLE  NOT FITTED TO THE VEHICLE

 GOOD  ADEQUATE  MARGINAL  WEAK  POOR

SAFETY BACKUP

Total 90%

SYSTEM FAILURE 23.3 / 25 PTS

	ENGAGEMENT	WARNING
SENSOR BLOCKED AT START-UP		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	Partial blockage after a 5 minute drive	Yes after sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM INACTIVE		
Camera	Full blockage after a 5 minute drive	Yes after sensor blocking
Radar	After a 5 minute drive	After sensor blocking
SENSOR BLOCKED WITH VEHICLE IN MOTION, SYSTEM ACTIVE		
Camera	Full blockage within 2 minutes after blocking	Unknown (no OEM data) after sensor blocking
Radar	Partial blockage after sensor blocking	Unknown (no OEM data) after sensor blocking

UNRESPONSIVE DRIVER INTERVENTION 20.0 / 25 PTS

Hands Off Warning Timeline



COLLISION AVOIDANCE 47.6 / 50 PTS

SCENARIOS			
Approaching a stationary target	GOOD	ADEQUATE	—
Approaching a slower moving target	GOOD	GOOD	—
Approaching a braking target	ADEQUATE	ADEQUATE	—
Target cutting-in in front	ADEQUATE	GOOD	—
Car cutting-out in front to expose target	GOOD	GOOD	—
Approaching the target along the roadside	—	—	GOOD

GOOD
 ADEQUATE
 MARGINAL
 WEAK
 POOR