

# BMW AUTHORITY VEHICLES

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# "READY FOR ACTION."

# Dear Sir or Madam,

Be it in the police force, fire brigade, ambulance service, at security firms or in undercover investigation work: the demands placed on emergency service personnel are constantly increasing.

These specialists therefore depend on exceptional vehicles that are dynamic and efficient, flexible and reliable, both in everyday driving and emergency situations.

For almost 70 years now, BMW has been working with government authorities around the world to develop vehicles that meet the highest standards and are suited to all kinds of missions. With sophisticated innovations such as versatile networking via BMW ConnectedDrive, BMW consistently helps make the hard work of the emergency services easier when they are in action. Furthermore, the intelligent BMW EfficientDynamics programme of technologies ensures that using BMW Authority Vehicles is financially prudent – and environmentally sustainable.

Let BMW convince you. We thank you for your trust and assure you: we are ready for action. Your BMW Authority Vehicles Team



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# SPECIALISTS FOR ALL SITUATIONS.

Paramedics, firefighters, uniformed and undercover police – perfected in almost 70 years of working with authorities around the world. The result is state-of-the-art Authority everyone who works in the emergency services has one thing in common: their work regularly requires outstanding Vehicles that offer the highest level of safety, cost-effecperformance in high-pressure situations. Their emergency tiveness and innovation. vehicle is of key importance here. BMW's Authority Vehicles – www.bmw-authority-vehicles.com ranging from the BMW 1 Series, through the 3 Series, Image shows vehicle homologated and approved for the German market and may contain equipment features only available in this market. Please contact your BMW partner to find out which vehicles and equipment features are available to you. 5 Series, and i7/7 Series, to the models BMW X1, iX1, X3 and X5 – have been systematically developed and



# **GUARDIAN ANGELS AREN'T** EVERYWHERE.BUT THEY ARE QUICK TO THE SCENE.

When it comes to saving lives, every second counts. However, increasing traffic density and inattentive road users increase the risks for the emergency driver. Anyone who puts their own life at risk must therefore be able to rely 100% on their emergency vehicle. Every authority is on the safe side with BMW. Thanks to fully integrated technologies for the active and passive safety of emergency authorities guarantee guality-, time- and cost-optimised service personnel, the risks of deployment are minimised even in high-risk situations. BMW provides its original BMW manufacturer quality guarantee for Authority Vehicles and all the special equipment.

In addition, BMW subjects its Authority Vehicles, including the equipment, to stringent tests such as crash or skid tests and rollover or roof crush tests, which go far beyond the standard requirements. Deployment-dependent service intervals (Condition Based Service) and BMW's supply of spare parts for the entire equipment range for use of Authority Vehicles.





### Oliver Meermann State Executive Committee Managing Director, Johanniter Air Rescue

### Johanniter-Unfall-Hilfe e.V. Hesse/Rhineland-Palatinate/Saarland Regional Association

"An essential part of our work is to be there around the clock for the people who need our support in an emergency. Reliability and comfort play the top priority for us, which is why we consciously opted for BMW to be that trusted partner at our side."

# Guaranteed first-hand quality.

- Crash or skid test for checking the equipment
- Rollover or roof crush test with warning system
- Passive safety system compatible with the equipment
- Condition Based Service: dynamic service interval display based on individual operating conditions
- BMW spare parts supply incl. equipment
- Original BMW manufacturer quality guarantee for special equipment

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# FULLY CONNECTED: THANKS TO BMW CONNECTED DRIVE.

The digital products and Connected Services from BMW ConnectedDrive offer a wide range of useful functions, including route transmission and data transfer directly into the vehicle. Real Time Traffic Information (RTTI) informs you about the current traffic situation in real time, warns you of traffic congestion and, if necessary, redirects you to save time.

For more information: https://www.bmw-connecteddrive.com/country-region-select/country-region-selection.html

# Mr Szymoniak, Regional Director of Landesfeuerwehrverband Mecklenburg-Vorpommern e.V.:

"Getting to the scene quickly is of the utmost importance for our work. It is therefore essential that we have a vehicle with equipment that we can rely on in any situation. Real Time Traffic

Information (RTTI) knows the current traffic situation almost in real time and automatically calculates alternative routes. It also warns us of adverse road conditions or accidents on our route. It is for all these reasons that we are very pleased to have BMW as a reliable partner."

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# IN USE GLOBALLY. ON THE SCENE LOCALLY.

The requirements of the emergency services may differ considerably from country to country. This applies to the individual appearance of the various authorities as well as the optional equipment. Here too, BMW vehicles demonstrate their superiority, as they can be adapted to suit the respective requirements. Thanks to the close and long-standing collaboration with international authorities, BMW has succeeded in creating a perfect basis so that even the most exacting customer requests can be easily implemented by the customer locally with their conversion partners. BMW Authority Vehicles undergo constant further development in order to extend the leading technical edge in the future too.

Vehicle shown contains equipment features installed by independent third parties. Please contact your BMW partner for details.













# **VEHICLE RANGE.** THE PERFECT VEHICLE IN EVERY SITUATION.

AUTHORITY VEHICLES. Always at your service.

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UNMARKED AUTHORITY VEHICLES AND SECURITY VEHICLES. Always in safe hands.

BMW MOTORRAD. Always ahead.

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# BMW 1 Series. DYNAMICS AND AGILITY IN EVERY SITUATION.

With its compact external dimensions, the **BMW 1 Series** has an impressively spacious interior. Efficient engines delivering up to 225 kW (306 hp) and state-of-the-art running gear technologies guarantee full dynamics and agility, while innovative technologies and driver assistance systems ensure that you always reach your destination safely and comfortably. Equipped with intelligent BMW xDrive all-wheel drive, it effortlessly masters even challenging driving situations.

BMW Live Cockpit Professional with its 12.25-inch central information display, in conjunction with the optional BMW Head-up display, ensures that all important information is available at a glance at all times. With a luggage compartment capacity of up to 1,200 litres and a maximum payload of up to 530 kg, the BMW 1 Series provides maximum storage space with maximum flexibility.

# FD 1264

# BMW 3 Series.

The BMW 3 Series combines outstanding agility and utiliwerful BMW combustion engine. Depending on the drive ty. This is primarily due to the suspension, with the 50:50 mode, you can drive locally emission-free and silently or axle-load distribution and rear-wheel drive that are typical with thrillingly high torque. Practical functions such as of BMW. The steering is free of drivetrain influences, which the standard automatic opening and closing tailgate with makes it incomparably spontaneous and precise. For even a separately opening rear window also make the BMW 3 Series Touring a versatile and practical deployment better traction and directional stability, you can opt for xDrive, BMW's intelligent all-wheel drive system, which is vehicle. available as an option for numerous models. Incidentally, this is also available for our new plug-in hybrids. They combine BMW eDrive electric drive technology with a po-



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# THE DRIVING FORCE BEHIND EVERY DEPLOYMENT.

# BMW 5 Series. A PERFECT COMBINATION OF DYNAMISM AND VERSATILITY.

The **BMW 5 Series** remains in the lead – and emergency fectiveness and particularly low operating costs. When it service personnel will benefit from its outstanding qualities. For example, diesel engines such as those in the BMW 520d or plug-in hybrids such as the 545e and the new fully electric i5 once again set standards in their class by combining extremely low fuel consumption or being fully electrically powered with snappy acceleration and high torque characteristics. This is ensured by numerous innovative BMW EfficientDynamics technologies. In total, the BMW 5 Series impresses with its unmatched cost-ef-

comes to demonstrating the highest level of concentration and superiority even in demanding situations, there is no better workplace than the BMW 5 Series with its thoroughly driver-oriented cockpit.

The optionally available Integral Active Steering improves manoeuvrability and increases driving stability. The optional full-colour BMW Head-up display projects relevant information directly into the driver's field of view – allowing them to keep the traffic situation in sight at all times.

If you're looking for maximum variability and enjoyment Easy charging, anytime and anywhere. The BMW i5 also you will soon no longer want to do without the BMW 5 makes a contribution on the way towards a more sus-Series Touring in everyday life: it boasts a wide range tainable future. By employing secondary materials and of loading options and a large loading volume of up to making use of green electricity in the manufacturing pro-1,700 litres. What is more, even with a maximum payload cess, we are already optimising the footprint of the BMW of 695 kg and the standard rear-axle self-levelling air i5 even before it is handed over to you. During the journey, suspension, the BMW 5 Series still offers sufficient safety the innovative technologies of EfficientDynamics ensure the perfect balance between efficiency and performance. reserves. Electric acceleration, BMW My Modes, Iconic Sounds and Furthermore, the BMW i5 offers the option of a vegan more: driving pleasure in the BMW i5 has many facets. interior for the very first time.



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# BMWX1. AN ALL-ROUNDER IN ANY SITUATION.

The **BMW X1.** Reliable and always ready for action. Versatile No matter whether you opt for the sDrive model with rearand flexible, even in small spaces. Fast, manoeuvrable, precise. Economic use of resources – but with an impressive with its outstanding agility. Thanks to the raised seat result: this is how emergency service personnel act when it matters the most. And the BMW X1 drives the same way. picture in any situation. With a spacious interior and a The BMW TwinPower Turbo 4-cylinder petrol and diesel engines combine top performance with efficiency. The vehicle's centre of gravity is low with an optimum axle-load distribution of almost 50 : 50.

wheel drive or the xDrive model: every BMW X1 impresses position and BMW Head-up display, you can see the big 40:20:40 split rear bench seat, the BMW X1 is ready for any mission.

# BMW X3. CAPABLE OF ANYTHING WITH A GOOD OVERVIEW.

The **BMW X3** is designed for tough and demanding missions, even on difficult terrain – it impresses with its exceptional versatility. Innovative technologies such as intelligent BMW xDrive all-wheel drive support the driver in every situation. The flat window line and raised seat position provide a superior overview and, thanks to the optional seat with active seat ventilation, you won't break a sweat even in critical situations. Of course, the BMW X3 also leads the way as a role model:



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thanks to the multi-award-winning BMW EfficientDynamics technology package and the available plug-in hybrids, performance has once again been increased while fuel consumption and emissions have been further reduced significantly. The 8-speed Steptronic transmission is combined with an Auto Start/Stop function in the BMW X3. In this way, cost-effectiveness could be further improved without compromising the high level of responsiveness you would expect from a BMW.



BMW 7 Series AS AN UNMARKED AUTHORITY VEHICLE. PERFECT MISSION EQUIPMENT THAT DOES NOT STAND OUT.

BMW offers additional equipment for the BMW 7 Series in order to be ready for use at any time, even as an official innovative and sustainable plug-in hybrids 745e, 745Le and 745Le xDrive represent the best of both worlds. escort vehicle for representative duties or undercover investigations. The specialised requirements for these vehicles and thus ellow for the planning phase of the production webicles and thus ellow for the intelligent integration of vehicles and thus allow for the intelligent integration of individual and highly discrete special equipment.

# Particularly in our top model, the BMW 7 Series, the



# BMW X5. MORE FREEDOM ON ANY TERRAIN.

With the enhanced TwinPower Turbo assembly and the outstanding traction of intelligent BMW xDrive all-wheel drive, the **BMW X5** offers driving pleasure on any terrain. The optional xOffroad package ensures finer tuning in every mission: four selectable off-road modes adapt the all-wheel drive exactly to the current driving surface. And the plug-in hybrid BMW X5 allows you to experience the perfect combination of sustainable mobility and efficient driving dynamics. The BMW X5 also features the latest generation of BMW Connectivity technologies.

State-of-the-art driver assistance systems create seamless networking with the outside world and, thanks to intuitive operation, offer maximum comfort and the greatest possible level of safety. As a BMW Authority Vehicle, the BMW X5 has the largest loading volume of up to 1,870 l and the highest maximum payload of up to 1,005 kg, which it handles perfectly thanks to the adaptive 2-axle air suspension.

# PROTECTION VEHICLES. TRUST IS GOOD.

BMW has been developing and producing security vehicles In order to guarantee **unrestricted driving dynamics** that meet the highest demands and standards for more combined with **unparalleled comfort**, running gear than 45 years. designed for the highest load is installed ex works. The standard restraint systems and airbags also retain One of the most important lessons we have gleaned from their full functionality.

this is that only those who fulfil all aspects of a security concept from a single source can develop a vehicle with comprehensive protection without making any compromises. The integration of protective measures and the inherently required additional weight are already taken into account in the design of the production vehicle.

Combined with **innovative materials** and **state-of-the**www.bmw-special-sales.com **art development techniques**, this approach enables the (1) VPAM is the association of test laboratories for attack-resistant materials and constructions. perfectly coordinated integration of all protective elements. All protective measures, such as protective glass, underbody fragmentation protection or shaped parts made of high-strength steel, are integrated without affecting the discrete exterior appearance of the production vehicle.



**BMW X5 PROTECTION VR6** in the world, the AK-47 assault rifle.

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In addition to the **strict quality standards** that every BMW security vehicle must meet, the vehicles are tested and certified in accordance with the currently valid internationally recognised official test guidelines of VPAM(1) against shelling (BRV 2009) and blasting (ERV 2010).

# BMW MOTORRAD MOTORCYCLES. EXPERTISE FOR EVERY MISSION.

BMW Motorrad motorcycles impress with a sophisticated to form an exemplary synthesis, which is particularly concept that meets the highest demands in terms of flexibility, agile handling, robust technology and dynamic appearance. Here, highly developed safety components (ABS series) are combined with first-class smoothness, long-distance comfort and extraordinary power potential

important for work in the police, rescue and escort services. The specially developed rider's equipment for authorities rounds off the holistic concept from BMW Motorrad.





The **BMW F800 GS-P** is the logical continuation of BMW Motorrad's legendary GS concept and impresses with its resilience and agility. Thanks to its low weight combined with high power and easy handling, the BMW F 750 GS-P is the ideal Authority Motorcycle for use in urban or rural areas.





The **BMW R1250 RT-P** is the superior all-rounder that sets itself apart with every task, be it police operations on the motorway or escort service in the city. Driven by the powerful and efficient BMW ShiftCam boxer engine, it offers ergonomic long-distance comfort as well as dynamism and agility. Thanks to a wide range of equipment options, it can be adapted to many specialised requirements and is therefore the Authority Vehicle for a wide range of requirements.

# **INNOVATIONS AND TECHNOLOGY.** TECHNOLOGY AT THE HIGHEST LEVEL.

BMW TWIN POWER TURBO ENGINES. The heart of BMW EfficientDynamics.

BMW eDRIVE. Confidently sustainable.

RUNNING GEAR. The best foundation for greater comfort and driving dynamics.

BMW EFFICIENT DYNAMICS. Less consumption. More driving pleasure.



# BMW TWIN POWER TURBO ENGINES. THE HEART OF BMW EFFICIENT DYNAMICS.



# BMW TwinPower Turbo petrol and diesel engines.

Thanks to BMW TwinPower Turbo technology, the innovative BMW petrol and diesel engines from the BMW EfficientDynamics engine family enable greater dynamic power delivery and excellent response characteristics even at low engine speeds. At the same time, they are particularly economical and low-emission. The increased efficiency and optimum dynamics guarantee noticeably more intense driving pleasure. The petrol engines make use of innovative turbo charger technology, the fully variable Valvetronic valve control, including double VANOS

and direct high precision injection. Together, the highly developed components ensure tremendous performance with high efficiency. Turbochargers with variable turbine geometry are also used for the diesel engines. Combined with the latest generation common rail direct injection, this results in optimised combustion and makes a further contribution to reducing consumption and emissions.

# BMW eDRIVE. ELECTROMOBILITY FROM BMW



WITH A CONSISTENT SUSTAINABILITY STRATEGY, THE BMW GROUP SETS NEW STANDARDS IN THE AUTOMOTIVE SECTOR.

For the BMW Group, driving pleasure goes far beyond mobility. For us, the topic of sustainability is a core issue in which we do not compromise. On the contrary: we are moving into the future with a completely new and consistent strategy that not only goes far beyond our direct sphere of influence, but also takes the topic of sustainability to a whole new level.

Over the past years and decades, we have already set significant Did you know that as far back as the 1972 Summer Olympics standards in the ecological balance sheet of our vehicles – in Munich, an all-electric BMW 1602e was used during the starting with the resources used, through to energy consumption, endurance races to drive in front of the athletes to film them and to the recycling share. Over the next few years, we will continue supply them with water if necessary? At the time, it was the to expand our extensive electrification strategy and offer ideal emission-free and noiseless companion that did not hinder 25 electrified models in 2023. the athletes' top performance. Today, almost five decades later, we have perfected this suitability and our know-how in the field of electrified mobility by continuously further developing the BMW eDrive technology and the BMW i sub brand.

However, the goal of climate neutrality and zero-emission mobility can only be achieved through a variety of electrified drive technologies. Therefore, and in order to achieve even areater flexibility in terms of our customers' needs, we will continue to drive our commitment to the development of hydrogen fuel cells in a technology-neutral approach. We presented the BMW i Hydrogen NEXT concept at the IAA 2019. In the next step, we will present a small series of the BMW i Hydrogen NEXT in 2022. Step by step, we are embarking on new paths towards an environmentally friendly and emission-free future.

# PLUG-IN HYBRIDS - THE BEST OF BOTH WORLDS

With the combination of a petrol engine and an electric motor, BMW's plug-in hybrids guarantee maximum flexibility and are therefore perfectly suited to the individual requirements and needs of your everyday life. The expertise of the all-electric BMW eDrive

(1) Range depends on various factors, in particular: personal driving style, road conditions, ambient temperature, heating/air conditioning, pre-temperature setting.

technology of the BMW i sub brand enables purely electric ranges(1) up to 70 km (depending on the model) – making the electric and local emission-free drive ideally suited for urban traffic. On longer journeys or on motorways, you can still enjoy the the convenience of a combustion engine's range. Thanks to intelligent energy distribution, the BMW plug-in hybrid automatically switches between the drives as needed, thus guaranteeing maximum efficiency at all times. The fleet of BMW plug-in hybrids is growing continuously.

# 100% ELECTRIC. 100% DRIVING PLEASURE. 100% BMW.

In terms of electric mobility, 2022 was a special year for BMW Authority Vehicles, as we launched the fully electric BMW i7 and iX1 Authority Vehicles. And models like the i5 followed in 2023. Electric drivetrains are a prerequisite for climate-neutral mobility of the future. This is why the BMW Group is consistently expanding its range of electric vehicles.

As early as 2023, the Group will offer at least one fully electric model in virtually all key segments. From 2025 onwards, the BMW Group plans to increase its delivery share of all-electric vehicles to 50% with the Neue Klasse, while also further reducing its carbon footprint over the entire life cycle. In doing so, it will utilize its experience as a pioneer of e-mobility.

# RUNNING GEAR.

THE BEST FOUNDATION FOR GREATER COMFORT AND DRIVING DYNAMICS.



The intelligent **BMW xDrive all-wheel drive system** continuously and variably distributes the drive force to the front and rear wheels – for increased traction, driving dynamics, directional stability and driving safety in every traffic situation.

BMW's modern **front-wheel drive concept** combines active driving demands and comfort. The driven front axle is designed for the best possible driving dynamics and precise steering behaviour. The compact front-wheel drive design with transversely installed engines allows for a generous amount of space in the interior of this vehicle concept.

The optional **Integral Active Steering** combines variable active steering on the front axle with additional steering rear wheels via the speed. It offers greater manoeuvrability and agility in the lower speed range thanks to counter-steering on the rear axle. From around 60 km/h, the rear wheels steer in parallel to increase stability and comfort.

The lowered **Adaptive M suspension** combines driving dynamics with comfort and automatically adapts to the road condition and driving style.

Dynamic Stability Control (DSC) permanently records the driving condition and stabilises the vehicle via engine and brake management if unstable driving conditions become apparent. Other DSC functions include brake drying by applying the brake, brake standby and drive-off assistant, which holds the vehicle briefly when moving off on uphill gradients and thus prevents it from rolling backwards.

The **adaptive suspension** enables the damper characteristics to be adapted to the driving situation and combines driving comfort and driving dynamics with maximum safety. You can use Driving Experience Control to preselect the COMFORT default setting or SPORT mode.

The **Hill Descent Control** equipment of the xDrive models is a downhill control that, when activated, ensures that the vehicle can automatically and safely manage steep downhill stretches at a speed slightly higher than walking speed – without the driver having to brake.

Adaptive 2-axle air suspension enables particularly comfortable driving with high driving dynamics and facilitates entry and exit as well as loading. The air suspension automatically keeps the vehicle at a constant height regardless of the load. It can also be raised or lowered manually at the push of a button.

BMW EFFICIENT DYNAMICS. LOWER EMISSIONS, MORE DRIVING PLEASURE.

# MORE STEAM. LESS THIRST.

More power from up to eight cylinders: consume less, experience more – the BMW TwinPower Turbo engines offer the highest possible dynamics with the greatest possible efficiency thanks to the latest injection systems, variable powercontrol and sophisticated turbocharger technology. No matter whether diesel or petrol, no matter how many cylinders: the power plants of the BMW Efficient Dynamics engine family enable much more feisty power delivery as well as excellent response characteristics even at low engine speeds and are also economical and low-emission.



# **48-VOLT MILD HYBRID TECHNOLOGY INCL. INTELLIGENT START/STOP FUNCTION**

The 48-volt mild hybrid technology enables energy to be recovered when decelerating the vehicle, which is then used to help the combustion engine accelerate. This reduces consumption and emissions – with improved dynamics. Thanks to 48-volt mild hybrid technology, the Automatic Start/Stop function is even faster, more convenient and available in an extended speed range. During the deceleration phases (braking and coasting), the engine switches off in comfort mode from 15 km/h, enabling consumption- and emission-free coasting.

# MORE DRIVING PLEASURE. LOWER EMISSIONS.

BMW EfficientDynamics is a technology package that not only includes the drive, but also the entire vehicle concept and smart energy management. Available as standard in every BMW, a series of innovative technologies contributes to continuously increasing efficiency. Through engine efficiency measures, electrification, lightweight construction and aerodynamic optimisations, BMW has succeeded in significantly reducing the CO<sub>2</sub> emissions of its fleet.

# MORE SPEED. LESS WEIGHT.

Less weight thanks to intelligent lightweight construction: sophisticated down to the smallest detail. Intelligent lightweight construction means that the most suitable material is selected for and installed at every location in the vehicle. With particularly lightweight high-tech materials such as aluminium or carbon, BMW Efficient Lightweight meets its goal of saving as much weight as possible. This makes the driving characteristics even more dynamic and increases the stability, safety and comfort of the vehicle.

# AERODYNAMICS

Through targeted aerodynamic measures, BMW optimises the drag coefficient and the efficiency as well as the acoustics in the interior. In addition, fuel consumption is reduced. The Active Air Stream kidney grille, air breather, air curtain on the front wheels and the aero wheels are targeted detailed measures to further reduce drag.

# BMW DRIVER ASSISTANCE SYSTEMS AND BMW PERSONAL COPILOT.

BMW DRIVER ASSISTANCE SYSTEMS.

The innovative BMW driver assistance systems make your BMW even more intelligent. Feel well looked after: with BMW Personal CoPilot driver assistance at your side, you can experience the best comfort and the highest level of safety. Whether in terms of driving, parking or visibility, the BMW Personal CoPilot driver assistance systems are there to assist you reliably in any situation. State-of-the-art systems such as radar, ultrasound and cameras reliably capture the vehicle surroundings and form the basis of intelligent driver assistance systems. Whether activated on request or as an emergency assistant in the background – the BMW Personal CoPilot driver assistance systems make every journey with your BMW even more pleasant and safer.



# INTELLIGENT PARKING.

No more parking stress. Parking Assistant Plus makes parking and manoeuvring easy. The equipment includes the Surround View system, consisting of Top View, Panorama View and Remote 3D View, as well as the Parking and Reversing Assistant. At speeds of up to 35 km/h, the Reversing Assistant saves the last 50 m of an access route and automatically drives it if desired. Your BMW takes over the steering and you can focus on monitoring the vehicle surroundings – ideal for garage entrances or angled approaches.



# DRIVER ASSISTANCE SYSTEMS ON TOUGH MISSIONS.

For these special topics, we work in an interdisciplinary manner with all the relevant internal specialist departments for BMW Authority Vehicles, as there is a lot to consider for our special customer group. Driver assistance systems are intended to prevent mission journeys from being hampered in any way. That's why all systems – except for those legally prescribed such as ABS – can be switched off with a simple press of the SARAH button in the centre of the cockpit. In this way, known scenarios such as "deliberate approach, special rights and rights of way with or without special signal" are taken into account.

A potential customised configuration can combine mission aspects and safety functions meaningfully by, for example, allowing comfort functions such as Active Cruise Control (ACC) to be activated in the event of a possible blue light convoy escort.





# INTELLIGENT DRIVING.

The innovative functions of the Driving Assistant Professional assist you in your driving task. Up to a speed of 210 km/h, the Steering and Lane Control Assistant assists steering in tight spaces with Active Cruise Control and guides the vehicle in the centre of the lane. Active Cruise Control with Stop&Go function maintains the desired speed and the set distance to the vehicle in front. The Speed Limit Assist system recognises road signs and automatically adapts the speed to the signage.



# INTELLIGENT SAFETY.

Every time you drive, a variety of intelligent driver assistance systems are available to increase your safety. Lane Keeping Assistant with active side collision protection assists you through automatically corrective steering interventions if you are about to leave the lane. Collisions with vehicles approaching from the side are also avoided with this assistant. Front Collision Warning with brake intervention also prevents possible rear-end collisions, while the Evasion Assistant helps you in evasive manoeuvres in front of standing or moving obstacles. If the driver encounters a medical emergency, the Emergency Stop Assistant takes control of the vehicle in order to bring it safely to a stop at the lane edge.

# **BMW AUTHORITY VEHICLES.** GOOD GENES, FACTORY-FITTED.

INTELLIGENT SOLUTIONS FOR AUTHORITY VEHICLES .Unmistakably BMW.

GOOD GENES FOR AUTHORITY VEHICLES. BMW ConnectedDrive.

TECHNICAL DATA. Engine/motor, driving performance, consumption, wheels and dimensional drawings.





# INTELLIGENT SOLUTIONS FOR AUTHORITY VEHICLES. UNMISTAKABLY BMW.

# HOW ARE THE BMW AUTHORITY VEHICLES ACTUALLY MADE?

Based on many years of expertise in the construction of private vehicles, we have incorporated the development of BMW Authority Vehicles in BMW M GmbH. Here, we ensure that the development in close contact with them. This enables us to offer tailor-made process of the Authority Vehicles takes place early on and in parallel to the respective model. An in-house team of engineers pools the in-depth knowledge developed over several decades in this special segment and works on the concept development, validation and industrialisation through to the start of production and subsequent support over the entire service life of the vehicle. In this way, we can guarantee that the special requirements of our customers are fundamentally and continuously taken into account and that the BMW Authority Vehicle is also available immediately at market launch.

### WHAT ADVANTAGES DOES THIS OFFER THE CUSTOMER?

We have maintained a trusting relationship on an equal footing with our customers that spans several decades and are always solutions that suit the respective requirements of the authorities or emergency services, be it paintwork, functional preparation or other customised technical retrofitting. This is to our mutual advantage because we can in turn incorporate the experience gained by police officers, firefighters or paramedics into the further development of our BMW Authority Vehicles. The result of this long-standing approach is that our customers always get exactly what they need for their daily work.

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### **Reinhard Knorr**

is a project manager for Authority Vehicles in the Development department of the BMW Group. With 10 years of experience in development and his in-depth understanding of the technology in this area, he knows exactly which high demands Authority Vehicles must meet.

# NOT ALL EMERGENCY VEHICLES ARE **AUTOMATICALLY THE SAME - EACH COUNTRY**

One future topic is electrification. In the near future, in addition HAS DIFFERENT GUIDELINES. to plug-in hybrids, we will also offer fully electric BMW Authority HOW DOES BMW HANDLE THIS? Vehicles that are adapted to the specific requirements of our customers and adjusted accordingly. We are also focusing on BMW offers a wide range of vehicle models for this purpose in driver assistance systems adapted to specific applications and order to be able to offer every customer around the world the digitalisation. In terms of development, we will therefore ensure right vehicle. Our many years of experience and networking that BMW Authority Vehicles will continue to prove themselves enable us to react quickly to the respective customer and market in tough missions in the future while incorporating modern driver requirements at all times. assistance systems.

With our highly integrated optional equipment fitted directly at the factory, the "good genes", we offer the best possible starting point for a country-specific conversion to an Authority Vehicle.



### Michael Robl

is a product manager for Authority Vehicles. With more than 10 years of sales experience focusing on authorities, including five years in an international setting, he knows exactly how to give the necessary weight to customers' requirements in the "Authority Vehicles" project.

# AND WHAT AWAITS US IN THE FUTURE?

# THE GOOD GENES FOR AUTHORITY VEHICLES.

HIGHLY INTEGRATED OPTIONAL EQUIPMENT FITTED DIRECTLY AT THE FACTORY.

# THE GREATEST COMMON DENOMINATOR FOR A "SIMPLE" LOCAL CONVERSION INTO AN AUTHORITY VEHICLE WORLDWIDE.

The Good Genes – this is what we at BMW call all highly integrated optional equipment for Authority Vehicles fitted directly at the factory. They are developed together with the basic vehicle and optimally adapted to it. Installation takes place directly on the production line in BMW's plants – in the premium quality you would expect from BMW.

It is optional equipment that is aimed at the special requirements of our customers on all continents and thus defines the greatest common denominator. Everything is designed in such a way that customers' special requests can be implemented very easily. BMW thus offers the optimum basis for a perfectly functioning and cost-effective upgrade by a conversion partner to a BMW Authority Vehicle – "plug and play", if you will!

In addition, we offer BMW accessory solutions specially tailored to Authority Vehicles, such as partition grilles, for in-house retrofitting via the BMW Retailer Organisation.

### Authority Vehicle preparation.

This is how it all starts! The optional equipment includes an extended cable harness as a gateway to the vehicle. Furthermore, the largest possible battery and generator for this type is installed. An additional and discreetly installed loudspeaker in the instrument panel completes the offer.

### Additional power supply.

Our "Authority Vehicle preparation" optional equipment for vehicles with combustion engines includes an auxiliary battery with 60 AH in the luggage compartment, which is connected via a cut-off relay. For plug-in hybrids, the functionality is the same, but there is no auxiliary battery, as the internal high-voltage battery is integrated via an intelligent power distribution box. The delivery specification also includes the authority control unit for straightforward connection of radio transceivers, special signal systems or accident data memories. It provides the necessary data in the internationally used CIA 447 protocol.



### **Reinforced brakes.**

A larger brake adapted to the increased stress with corresponding cooling can deal with any critical situation – as you would expect from a BMW Authority Vehicle.

### Adaptation to increased load.

In order to guarantee the proverbial driving pleasure even with permanently high loads, we offer the installation of stronger springs and dampers as part of the optional equipment. This option is particularly suitable if equipment with an additional weight of 40 kg to 180 kg is permanently carried in the luggage compartment as the basic equipment of Authority Vehicles blue light, auxiliary battery, siren, radio or partition grille.

# BMW CONNECTED DRIVE. TELEMATICS WITH DATA PROTECTION ON BOARD.



# ALL THE COMFORT, JUST UNDERCOVER.

Keep an overview of your fleet. BMW Fleet Management BMW driver assistance systems, multimedia and telematics functions offer you the highest level of comfort, safety and solutions provide you with information well in advance about entertainment. Deactivated localisation ensures anonymity and maintenance intervals, the condition of wear parts and mileage. effectively protects you from being tracked. This allows you to optimise the use of your vehicles and manage capacities in a targeted manner by determining which data is transferred from the vehicles.



# MISSION-SUPPORTING TELEMATICS.

The BMW ConnectedDrive functions provide distraction-free support even on demanding missions. A reduction to traffic telematics and networked safety functions, in conjunction with flexible app solutions such as the Emergency Lane Assistant, also assist you in special situations. In addition, the navigation system provides enhanced information such as points of interest.

# WELL MANAGED ON MISSIONS.

# CUSTOMISED TELEMATICS.

BMW ConnectedDrive – telematics with data protection on board. The use of networked telematics systems depends greatly on the specific purpose of the BMW Authority Vehicle. We would be pleased to provide you with information about the BMW ConnectedDrive systems and optimise them for your specific purpose with customised app solutions.

Image shows vehicle homologated and approved for the German market and may contain equipment features only available in this market. Please contact your BMW partner to find out which vehicles and equipment features are available to you.

BMW Motorrad		F 750 GS-P	F 850 GS-P	R 1250 RT-P
Engine(1)(2)				
Cylinders		2	2	2
Displacement	cm <sup>3</sup>	853	853	1254
Nominal power comusion engine	kW (hp)	57 (77)	70 (95)	100 (136)
Nominal electrical power	kW (hp)	-	-	-
System power(3)	kW (hp)	-	-	-
Driving perfomance				
Acceleration 0-100 km/h	S	-(4)	-[4]	-[4]
Maximum speed	km/h	190	200	200
Fuel economy/emissions(1)(2)				
Fuel consumption, combined WL TP	l/100 km	4,2	4,2	4.75
CO2 emissions, combined WLTP	g/km	-(4)	-[4]	-[4]
Energy consumption, combined WL TP	kWh/100 km	-	-	-
Electric range, WL TP	km	-	-	-
Stationary noise level(4)	dB(A)/1/min	-[4]	-[4]	-[4]
Pass-by noise(4)	dB(A)	-[4]	-[4]	-[4]
Fuel capacity		15	15	25

Engine(1)(2))	
Cylinders	
Displacement	
Nominal power comusion engine	kW
Nominal electrical power	kW
System power(3)	kW
Driving perfomance	
Acceleration 0-100 km/h	
Maximum speed	
Fuel economy/emissions(1)(2)	
Fuel consumption, combined WL TP	I/10
CO2 emissions, combined WL TP	
Energy consumption, combined WL TP	kWh/10
Electric range, WLTP	
Stationary noise level(4)	dB(A)/
Pass-by noise(4)	C
Fuel capacity	

BMW 1, 3, 5

BMW 7

BMW X1, X3 & X5		X1	Х3	X5
Engine(1)(2)				
Cylinders		3-4	4-6	6-8
Displacement	cm <sup>3</sup>	1499-1998	1998-2998	2993-4395
Nominal power comusion engine	kW (hp)	100-221 (136-300)	135-265 (184-360)	210-390 (286-530)
Nominal electrical power	kW (hp)	15-130 (20-177)	8-80 (11-109)	9-145 (12-197)
System power(3)	kW (hp)	120-240 (163-326)	215 (292)	360 (489)
Driving perfomance				
Acceleration 0-100 km/h	S	9.2-5.4	8.4-4.9	6.1-4.3
Maximum speed	km/h	190-250	210-250	233-250
Fuel economy/emissions(1)(2)				
Fuel consumption, combined WL TP	l/100 km	8.2-0.7	9.5-2.1	12.5-0.8
CO2 emissions, combined WL TP	g/km	186-16	216-47	283-19
Energy consumption, combined WL TP	kWh/100 km	19.3-16.8	23.5-21.5	30.7-26.3
Electric range, WL TP	km	71-86	39-44	87-102
Stationary noise level(4)	dB(A)/1/min	- (4)	-(4)	-(4)
Pass-by noise(4)	dB(A)	-(4)	-(4)	-(4)
Fuel capacity		45-54	50-68	69-83

The figures for performance, consumption and CO<sup>2</sup> emissions refer to vehicles with standard transmission.

(1) Performance data of petrol engines apply to vehicles using RON 98 fuel. Fuel consumption data apply to vehicles using reference fuels in accordance with EU Regulation 715/2007. Unleaded RON 91 and higher with a maximum ethanol content of 10% (E10) may also be used. BMW recommends RON 95 fuel. For high-performance automobiles, BMW recommends RON 98 fuel.
 (2) Official data for fuel consumption, CO2 emissions, power consumption and electric range was determined in accordance with the prescribed measuring procedure and corresponds to European Regulation (EC) 715/2007 in the applicable version. For ranges, data determined as per WLTP takes into account any optional equipment (available on the German market in this case). For vehicles that have been newly type approved since 1 January 2021, only the official data according to WLTP exists. In addition, NEDC values are deleted from the certificates of conformity as of 1 January 2023 by EC regulation 2022/195. For more information about NEDC and WLTP measuring procedures visit www.bmw.com/wltp

Further information about fuel consumption and official model-specific CO2 emissions of new passenger cars can be found in the "Guideline for fuel consumption, CO2 emissions and electric power consumption for new passenger cars", available free of charge at all points of sale, at the Deutsche Automobil Treuhand GmbH (DAT), Hellmuth-Hirth-Str. 1, 73760 Ostfildern-Scharnhausen, Germany, and under https://www.dat.de/co2/.
(3) Composed of combustion engine drive and electric drive. Electric drive depending on battery charging level.
(4) The values measured in accordance with UN/ECE Regulation No. 51/EU Regulation 540/2014 are rounded.
(5) Provisional figures; any missing figures were unavailable at the time of publication.

Engine(1)(2)			
Cylinders		6	
Displacement	cm <sup>3</sup>	2993-2998	
Nominal power comusion engine	kW (hp)	210-280 (286-381)	
Nominal electrical power	kW (hp)	13-145 (818-197)	
System power(3)	kW (hp)	220-420 (299-571)	
Driving perfomance			
Acceleration 0-100 km/h	S	5.8-4.3	
Maximum speed	km/h	250	
Fuel economy/emissions(1)(2)			
Fuel consumption, combined WL TP	l/100 km	6.8-1.0	
CO2 emissions, combined WLTP	g/km	179-23	
Energy consumption, combined WL TP	kWh/100 km	26.2-23.4	
Electric range, WL TP	km	70-80	
Stationary noise level(4)	dB(A)/1/min	- (4)	
Pass-by noise(4)	dB(A)	-[4]	
Fuel capacity		65-74	

	1	3	5
	3-4	4-6	4-6
cm <sup>3</sup>	1496-1998	1995-2993	1995-2998
kW (hp)	80-225 (109-306)	115-275 (156-374)	145-230 (197-313)
kW (hp)	-	8-80 (11-109)	8-145 (11-197)
kW (hp)	-	150-215 (204-292)	220-360 (299-489)
S	10.6-4.8	8.8-4.4	7.5-4.3
km/h	200-250	213-250	228-250
/100 km	8.0-4.6	8.7-1.4	6.4-0.6
g/km	180-120	196-32	157-13
/100 km	-	21.0-18.0	23.2-19.9
km	-	47-57	83-103
4)/1/min	- (4)	-(4)	-[4]
dB(A)	-[4]	-[4]	-[4]
	42-50	40-59	60

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BMW iX1, i7		iX1	i7	
Engine(1)(2)				
Cylinders		-	-	
Displacement	CM3	-	-	
Nominal power comusion engine	kW (hp)	-		
Nominal electrical power	kW (hp)	-		
System power(3)	kW (hp)	150-230 (204-313)	335-485 (455-659)	
Driving perfomance				
Acceleration 0-100 km/h	S	9.2-5.4	5.5-3.7	
Maximum speed	km/h	190-250	205-250	
Fuel economy/emissions(1)(2)				
Fuel consumption, combined WL TP	l/100 km	-	-	
CO2 emissions, combined WL TP	g/km	-	-	
Energy consumption, combined WL TP	kWh/100 km	18.1-15.4	23.7-18.5	
Electric range, WL TP	km	417-474	490-624	
Stationary noise level(4)	dB(A)/1/min	- (4)	-[4]	
Pass-by noise(4)	dB(A)	-(4)	-[4]	
Fuel capacity		-	-	

BMW Protection		7 Protection	X5 Protection VR6	
Engine(1)(2)				
Cylinders		8 (4)	8 (4)	
Displacement	cm <sup>3</sup>	5500 (4)	4395 (4)	
Nominal power comusion engine	kW (hp)	390 (530)(4)	390 (530)(4)	
Nominal electrical power	kW (hp)	9 (12)(4)	9 (12)(4)	
System power(3)	kW (hp)	390 (530)(4)	390(530)(4)	
Driving perfomance				
Acceleration 0-100 km/h	S	6.6 (4)	5.9 (4)	
Maximum speed	km/h	200 (4)	210 (4)	
Fuel economy/emissions(1)(2)				
Fuel consumption, combined WL TP	l/100 km	14.6 (4)	13.4 (4)	
CO2 emissions, combined WL TP	g/km	328.1 (4)	305 (4)	
Stationary noise level(4)	dB(A)/1/min	-(4)	78.0/3750 (4)	
Vorbeifahrtgeräusch(4)	dB(A)	-(4)	68.0 (4)	
Fuel capacity		-(4)	-[4]	

The figures for performance, consumption and CO<sup>2</sup> emissions refer to vehicles with standard transmission.

(1) Performance data of petrol engines apply to vehicles using RON 98 fuel. Fuel consumption data apply to vehicles using reference fuels in accordance with EU Regulation 715/2007. Unleaded RON 91 and higher with a maximum ethanol content of 10% (E10) may also be used. BMW recommends RON 95 fuel. For high-performance automobiles, BMW recommends RON 98 fuel.
 (2) Official data for fuel consumption, CO2 emissions, power consumption and electric range was determined in accordance with the prescribed measuring procedure and corresponds to European Regulation (EC) 715/2007 in the applicable version. For ranges, data determined as per WLTP takes into account any optional equipment (available on the German market in this case). For vehicles that have been newly type approved since 1 January 2021, only the official data according to WLTP exists. In addition, NEDC values are deleted from the certificates of conformity as of 1 January 2023 by EC regulation 2022/195. For more information about NEDC and WLTP measuring procedures visit www.bmw.com/wltp

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### Technical data 43



This catalogue reflects models, equipment ranges and configuration options (standard equipment and optional equipment) of vehicles supplied by BMW AG for the German market. In other Member States of the European Union there may be deviations from the equipment ranges and configuration options described in this brochure with regard to standard and optional equipment for the individual models. Please contact your local BMW partner to find out about the different national-market versions offered. We reserve the right to make changes to designs and equipment.

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