

# The new BMW K 1600 GT. Table of contents.



<b>1. The new BMW K 1600 GT.</b> (Short version) .....	2
<b>2. Motorcycle technology and design.</b> .....	5
<b>3. Equipment program.</b> .....	10
<b>4. Engine output and torque.</b> .....	13
<b>5. Technical specifications.</b> .....	14

# 1. The new BMW K 1600 GT. (Short version)



## **The new BMW K 1600 GT – 6-cylinder performance and luxurious comfort for dynamic touring at the very highest level.**

6-cylinder in-line engines have been an integral part of BMW automobile history and brand identity for more than 80 years. With the launch of the K 1600 GT and GTL in 2010, BMW Motorrad not only succeeded in skilfully transferring this tradition to the motorcycle area but was also able to position on the market the lightest and most compact 6-cylinder in-line engine for motorcycles with a capacity of over 1,000 cubic centimetres.

Outstanding running smoothness and supreme performance from an output of 160 hp and a torque of 175 Nm were combined with luxurious comfort, virtually perfect wind and weather protection and a level of riding dynamics that was unrivalled in the segment. With the new K 1600 GT, BMW Motorrad takes the concept of the 6-cylinder high-performance touring bike further and presents it in an even more sophisticated, dynamic and comfortable form, unchanged in terms of performance figures but now designed to meet the requirements of the EU4 pollutant class.

## **Electronic suspension Dynamic ESA with automatic damping adaptation as standard.**

While the predecessor model already set new standards in the touring segment in terms of riding stability, dynamics and handling, the new K 1600 GT goes one step further. With the electronically controlled suspension Dynamic ESA as standard and its adjustment modes “Road” and “Dynamic”, both active riding experience and comfort have been significantly enhanced as compared to the predecessor model.

In the standard setting “Road”, damping adaptation is now fully automated across the entire range, thereby offering the very highest level of comfort and traction over virtually all surfaces. This ensures the optimum damping force in all riding states and regardless of load. Depending on customer preference, the spring preload can be adapted to the load state at the press of a button and independently of the damping. Likewise at the press of a button – conveniently positioned on the handlebars, so it is even possible during travel – the rider can switch to the damping characteristics “Dynamic”, thereby selecting a tighter damping set-up overall.

### **Convenient to manoeuvre due to new reverse assist.**

Even more convenient manoeuvring is enabled in the new K 1600 GT by the reverse assist, which can be simply activated from the left-handlebar panel at the press of a button. Movement itself is initiated by the rider by pressing on the starter motor button.

### **Shift Assistant Pro for shifting up and down without using the clutch.**

The Shift Assistant Pro available as an optional equipment item ex works allows the rider to shift up and down without activating the clutch, not only providing greater convenience but also additional dynamic performance. Most shifting can be carried out using the shift assistant.

### **Intelligent Emergency Call for rapid assistance in the event of an accident or in emergency situations.**

The fastest possible assistance in the event of an accident or emergency or in a dangerous situation is enabled in the new K 1600 GT by means of the e-call system "Intelligent Emergency Call", which is available as an ex works option. If an emergency situation or an accident occurs, the intelligent emergency call is activated automatically or manually, sending the position data of the motorcycle, and therefore the coordinates of the scene of the accident, setting the rescue chain in motion via the qualified BMW Call Center.

### **Instruments with newly designed dials.**

The speedometer and engine speed display in the new K 1600 GT now have newly designed dials. The speedometer now prominently bears the inscription K 1600 GT.

### **More dynamic design, optimised wind and weather protection and new colour schemes.**

While the K 1600 GT previously featured excellent wind and weather protection, its qualities in this area have been further optimised in the new K 1600 GT by means of redesigned side trim parts and enlarged slipstream deflectors. The generally even more dynamic design of the new K 1600 GT also includes three fresh new colour schemes, each of which skilfully showcases the varying character traits of the new performance touring bike.

While Mars Red metallic and Blackstorm metallic contrast with a frame in Asphalt Grey metallic matt, black gloss wheels and the engine in Platinum metallic matt to give the K 1600 GT an air of both refinement and agility, the "Sport" variant conveys dynamic competence. Here, Lupine Blue metallic in conjunction with Blackstorm metallic and a drivetrain finished in black together

with golden brake calipers highlight the athletic character of the 6-cylinder touring bike.

**An overview of highlights of the new BMW K 1600 GT.**

- 6-cylinder in-line engine including new catalytic converters and adapted data status according to EU4 requirements, with an unchanged output of 118 kW (160 hp) at 7 750 rpm and a maximum torque of 175 Nm at 6 500 rpm.
- Electronic suspension Dynamic ESA with automatic damping adaptation as standard.
- Reverse assist for even simpler manoeuvrability as an optional equipment item ex works.
- Shift Assistant Pro for shifting up and down without clutch as an ex-works option.
- Intelligent Emergency Call as an ex works option for rapid assistance in the event of an accident or in emergency situations.
- Instruments with newly designed dials. Speedometer with K 1600 GT inscription.
- Optimised wind and weather protection due to enlarged slipstream deflectors and newly designed side trim parts.
- Even more dynamic design.
- Three attractive new colour variants: Mars Red metallic, Blackstorm metallic and Lupine Blue metallic / Blackstorm metallic.

## 2. Motorcycle technology and design.



### **The new K 1600 GT: highly enjoyable performance touring combined with sporty dynamic flair and excellent comfort.**

When BMW Motorrad launched the 6-cylinder models K 1600 GT and K 1600 GTL in autumn 2010, it was tapping into the great BMW tradition of 6-cylinder engines and applying this in appropriate form to the motorcycle world. After all, no other brand has embodied the fascination of 6-cylinder in-line engines for more than 80 years in the automotive sector in the same way as BMW. The BMW K 1600 GT and the K 1600 GTL successfully combined the supreme performance and running smoothness of a 6-cylinder in-line engine with an imposing and distinctive appearance, fascinating riding dynamics and exceptional travel comfort.

### **Supreme engine expertise with six cylinders.**

With its 6-cylinder in-line engine, the new K 1600 GT likewise conveys a particular fascination, offering not just perfect running smoothness but also supreme performance and abundant torque. Still the most compact 6-cylinder in-line power unit in motorcycle series production, the engine has an output of 118 kW (160 hp) at 7 750 rpm, generates a maximum torque of 175 Nm at 6 500 rpm and thus offers supreme forward thrust in all conditions.

With an engine weight of 102.6 kilograms, the 6-cylinder engine of the K 1600 GT remains to this day not just the lightest series-production 6-cylinder engine for motorcycles in the category over 1000 cc: due its very narrow cylinder spacing, it is also significantly slimmer than all other serial production 6-cylinder in-line engines to date. Both are major contributing factors in creating the active riding character of the K 1600 GT.

The new K 1600 GT has been designed to meet the requirements of the EU4 pollutant class. This involved fitting it with such features as a new engine mapping, a fuel system with carbon canister for fuel tank ventilation and an exhaust system with altered catalytic converters as well as more dynamically designed end pieces whose horizontal ribbing lends even greater emphasis to the 6-cylinder theme.

**Even more manoeuvring convenience due to new reverse assist as an optional equipment item ex works.**

The new 6-cylinder bike now also meets the expectations of a model such as the K 1600 GT by providing a reverse assist. This is activated conveniently as required at the press of a button on the left-hand handlebar panel. As a result of this, the forward gear is blocked and the reverse gear is engaged.

Movement itself is initiated by the rider pressing on the starter motor button, which establishes propulsion via a bendable shaft.

**Three riding modes and Dynamic Traction Control DTC for maximum safety when accelerating.**

As is customary, riders of the new K 1600 GT have the riding modes “Rain”, “Road” and “Dynamic” directly available to them at the press of a button on the right-hand side of the handlebars so as to be able to adapt to different purposes such as road touring, riding on wet surfaces and sporty, dynamic riding. The traction control function DTC is combined individually with each of the different modes and is fully harmonised with them so as to ensure maximum riding safety.

**Shift Assistant Pro for shifting up and down without clutch as an ex-works option.**

The Shift Assistant Pro is now also available for the K 1600 GT, enabling the rider to shift up and down without activating the clutch or throttle valve in the relevant load and engine speed ranges, which gives the rider not just greater comfort but also a bonus in terms of dynamic performance. Most shifting can be carried out using the shift assistant. One exception is setting off, however.

When accelerating, the throttle valve no longer has to be closed for shifts using the throttle grip thanks to the Shift Assistant Pro, so propulsion power is virtually constant without torque interrupt. When decelerating and shifting down (throttle valve closed), the engine speed is automatically adapted by means of double-declutching. Gears are engaged as usual by means of the gear pedal.

Shift time is significantly reduced as compared to a gearshift using the clutch. Shift Assistant Pro supports the driver on virtually all shifts. However there is no shift support when the clutch is activated, when shifting up with the throttle grip closed (coasting) or when decelerating.

**Ideal concentration of masses, proven suspension technology for dynamic riding properties.**

The essential chassis elements of the new BMW K 1600 GT are the familiar light alloy bridge-type frame and the well-proven Duolever and Paralever

systems for wheel control at front and rear. The new K 1600 GT also benefits from a low overall centre of gravity with a very favourable concentration of masses and a balanced wheel load distribution for excellent riding properties.

### **Electronic suspension adaptation Dynamic ESA with automatic damping adaptation as standard.**

While the predecessor model already set new standards in the touring segment in terms of riding stability, dynamics and handling in all riding and load states, the new K 1600 GT goes one step further in terms of the suspension. With the electronically controlled suspension Dynamic ESA and its adjustment modes “Road” and “Dynamic”, it has been possible to significantly enhance both active riding experience and comfort as compared to the predecessor model.

In the standard setting “Road”, damping adaptation is now fully automated across the entire range, thereby offering the very highest level of comfort and traction over virtually all surfaces. This ensures the optimum damping force in all riding states and regardless of load.

Depending on customer preference, the spring preload can be adapted to the load state at the press of a button and independently of the damping. Likewise at the press of a button – conveniently positioned on the handlebars, so it is even possible during travel – the rider can switch to the damping characteristics “Dynamic”, thereby selecting a tighter damping set-up overall.

Using various parameters, the different riding states such as acceleration and deceleration of the new K 1600 GT are precisely identified so that the damping forces on the front and rear spring strut can be adapted within milliseconds. As a result, hitherto unrivalled damping comfort and a very stable ride response are ensured even in banking position.

### **Intelligent Emergency Call as an ex works option for swift assistance in the event of an accident or in emergency situations.**

Ensuring the fastest possible assistance in the event of an accident or in situations of emergency and danger can save people’s lives - something that particularly affects motorcyclists. For this reason, the new K 1600 GT can be fitted with the e-call system “Intelligent Emergency Call” as part of an optional equipment item available ex works.

If an emergency situation or an accident occurs, the intelligent emergency call is activated automatically or manually, sending the position data of the motorcycle, and therefore the coordinates of the accident scene, which in turn sets the rescue chain in motion via the qualified BMW Call Center. However,

the emergency call is not automatically triggered in situations which are not emergencies such as when the bike falls over when stationary, after single-vehicle accidents at low speeds, on impact caused by a pot-hole in the road or when passing over an obstacle.

Sensors on the motorcycle identify what event has occurred. A crash sensor detects events such as collision with another vehicle or an impact against an obstacle, while a banking sensor determines high-siders and low-siders, thereby identifying the motorcycle's position.

The operating unit of the optional equipment item "Intelligent Emergency Call" is located on the right-hand side of the handlebars and is compact and ergonomic in design. In addition to the cover-protected SOS button for triggering or interrupting the emergency call, there is also an integrated microphone and speaker. At the market launch of the new K 1600 GT, the optional equipment item "Intelligent Emergency Call" is initially only available in Germany. Other countries will follow.

### **Instruments with newly designed dials and an integrated operating concept with multi-controller and TFT screen.**

The instrument cluster of the new K 1600 GT has two classic circular instruments for the speedometer and engine speed display, the dials of which have been newly designed. The dial of the speedometer now prominently bears the inscription K 1600 GT. The information display on the 5.7-inch TFT colour screen allows attractive visualisation of text fields and graphics, among other things. Elements of the integrated operating concept include the multi-controller and a menu guidance system for controlling the comfort functions and the on-board computer.

### **New, more dynamic design as well as optimised wind and weather protection.**

While the K 1600 GT already featured excellent wind and weather protection before, its qualities in this area have been further optimised in the new K 1600 GT. The side trim parts are now newly designed from the larger and therefore efficient slipstream deflectors downwards. The upper side trim parts have been subjected to a more dynamic styling and are now stretched further back with a view to further enhanced wind and weather protection.

The new design has also included a revision of the two storage compartments on the left and right in the lower engine area. Finally, the carrier for the BMW emblem and the inscription have also been redesigned, while an additional skid protector in the side area of the engine and a newly designed gearbox

cover on the left-hand side of the motorcycle round off the changes in terms of the body.

The electrically adjustable windshield with memory function remains an exemplary feature. It not only protects the rider and pillion passenger from wind pressure and turbulence but also retracts to base position when the ignition is switched off, thereby also performing an anti-theft function for the navigation system which is available as an Original BMW Motorrad Accessory.

**Active riding ergonomics for comfortable yet dynamic touring and a comprehensive range of standard equipment features.**

The ergonomic design of the footrests, seating area and handlebar positions give the new K 1600 GT a very active seating position while still retaining a high level of comfort. Even though both rider and pillion passenger enjoy a relaxed knee angle, the seating position is still oriented towards the front wheel, therefore supporting dynamic motorcycling. What is more, height adjustment of the seat in the rider area allows adaptation to individual needs. The new K 1600 GT has a very extensive range of standard equipment. This includes heated grips and seat heating (for rider and passenger), a cruise control and an on-board computer.

**Individual colour concepts of very differing character.**

The new K 1600 GT reflects a skilful synthesis of supremacy, dynamic performance and comfort in terms of its colour schemes, too.

The body finishes Mars Red metallic and Blackstorm metallic provide a fascinating contrast in the K 1600 GT with the frame in Asphalt Grey metallic matt, black gloss wheels and the engine in Platinum metallic matt. This colour scheme highlights the technical components, clusters the lines and gives the motorcycle an appearance that is both refined and agile.

The K 1600 GT Sport conveys its dynamic capabilities in the colours Lupine Blue metallic / Blackstorm metallic with a drivetrain finished in black. Golden brake calipers and the smaller "Sport" windshield round off the image of the more sports-style 6-cylinder touring bike.

## 3. Equipment program.



### **Optional equipment and Original BMW Motorrad Accessories – perfect BMW Motorrad customisation.**

The K 1600 GT fulfils its “Gran Turismo” promise with a fascinating mixture of supremacy, dynamic performance and comfort to virtual perfection even in standard trim. Above and beyond this, BMW Motorrad as usual offers an extensive range of optional equipment and Original BMW Motorrad Accessories for further individualisation.

Options are supplied directly ex works and are integrated in the production process. Motorcycle accessories are installed by the BMW Motorrad dealer. These are features which can be retrofitted, too.

### **Options.**

#### **Safety Package:**

Adaptive turning light, daytime running light, tyre pressure control TPC, Hill Start Control.

#### **Comfort Package:**

Shift Assistant Pro, central locking, alarm system DWA, Keyless Ride, LED auxilliary headlights.

- Shift Assistant Pro.
- Reverse assist.
- Intelligent Emergency Call.
- Adaptive turning light.
- Tyre pressure control TPC.
- Central locking (only in conjunction with alarm system DWA).
- Alarm system DWA (only in conjunction with central locking).
- LED additional headlight.
- Rider's seat, low (780 / 800 mm).
- Audio system and preparation for navigation unit.
- Preparation for audio system and navigation unit.
- Preparation for navigation unit.

## **Original BMW Motorrad Accessories.**

### **HP Parts.**

- HP sports silencer.

### **Storage program.**

- Liners for touring case.
- Impact protection for touring case.
- Protective foil for touring case.
- Topcase in body finish, 49 l.
- Liner for topcase.
- Storage compartment for topcase.
- Additional brake light for topcase.
- Fuel tank bag, waterproof.
- Vario insert for tank rucksack.
- Softbag, small, 30 l – 35 l.

### **Design.**

- Windshield trim elements, chrome-plated.
- Case strips, chrome-plated.
- Topcase lid trim element, chrome-plated.
- Forged wheels.

### **Ergonomics and comfort.**

- Windshield, low.
- Seat, single-section, low (seat height: 750 mm).
- Seat, single-section (seat height: 780 mm).
- Seat, single-section, high (seat height: 810 mm).
- Rider's seat, height-adjustable (seat height: 780/800 mm).
- Rider's seat, height-adjustable, high (seat height: 810/830 mm).

### **Navigation and communication.**

- BMW Motorrad Navigator V.
- Dual USB charger with cable for 12V socket.

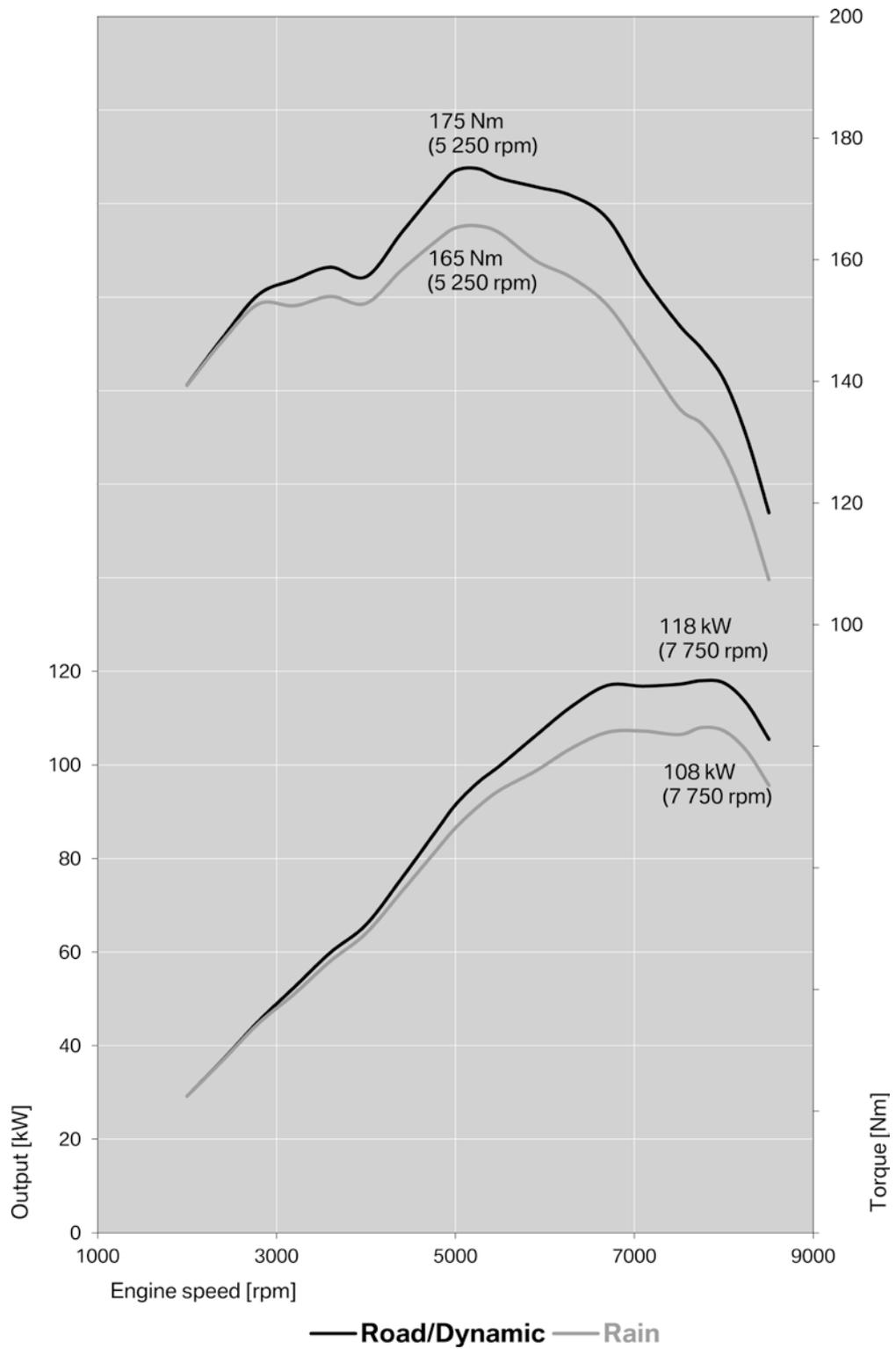
### **Safety.**

- Crash bar.
- LED additional headlight.
- Ground lighting (only in conjunction with central locking; only for certain countries (not ECE)).
- Brake disc lock with integrated alarm system.
- BMW Motorrad warning triangle.
- First aid set, large.
- First aid set, small.

**Maintenance and technology.**

- BMW Motorrad battery charger 230 V.
- BMW Motorrad battery charger 110 V.
- BMW Motorrad battery charger for UK.
- Multifunction tool.
- Mini foot pump.
- Repair set for tubeless tyres.

## 4. Engine output and torque.



## 5. Technical specifications.



<b>BMW K 1600 GT</b>		
<b>Engine</b>		
Capacity	cc	1649
Bore/stroke	mm	72/67.5
Output	kW/hp	118/160
at engine speed	rpm	7 750
Torque	Nm	175
at engine speed	rpm	5 250
Type		Series
No. of cylinders		6
Compression/fuel		12.2:1 / Premium unleaded (95 RON)
Valve control		Bucket tappets
Valves per cylinder		4
Ø intake/outlet	mm	29/24.8
Throttle valve diameter	mm	52
Engine control		BMS-X
Homologation standard		EU4
<b>Electrical system</b>		
Alternator	W	700
Battery	V/Ah	12/19
Headlight		Xenon low-beam headlamp Halogen high-beam headlamp
Starter	kW	0.7
<b>Power transmission - gearbox</b>		
Clutch		Multi-plate wet clutch, hydraulically activated
Gearbox		Constant-mesh 6-speed gearbox, helical cut
Primary ratio		1.617
Transmission ratios	I	2.230
	II	1.641
	III	1.319
	IV	1.101
	V	0.926
	VI	0.788
Rear wheel drive		Kardan, Bevel gear
Transmission ratio		2.75
<b>Suspension</b>		
Frame construction type		Main frame: chill cast Rear frame: aluminium, extrusion profiles
Front wheel control		BMW Motorrad Duolever
Rear wheel control		BMW Motorrad Paralever, central spring strut
Spring travel, front/rear	mm	115/135
Wheel castor	mm	106.4
Wheelbase	mm	1618
Steering head angle	°	62.2

<b>BMK K 1600 GT</b>		
Brakes	front	Twin disc brake, Ø 320 mm, 4-piston fixed calipers
	rear	Single disc brake, Ø 320 mm, 2-piston fixed caliper
ABS		BMW Motorrad ABS (partial integral)
Traction control		Optional BMW Motorrad DTC
Wheels		Aluminium cast wheels
	front	3.50 x 17"
	rear	6.00 x 17"
Tyres	front	120/70 ZR 17
	rear	190/55 ZR 17
<b>Dimensions and weights</b>		
Total length	mm	2324
Total width with/without mirrors	mm	1000/980
Seat height (without rider)	mm	810-830 (standard) 780-800 (optional rider's seat, low) 750 (single-section seat - accessory) 780 (single-section seat - accessory)
Unladen weight, incl. 90 % fuel	kg	319 (not including cases)
		334
Permitted total weight	kg	540
Fuel tank capacity	l	26.5
<b>Performance figures</b>		
Fuel consumption (WMTC)	l/100 km	5.7
Acceleration 0-100 km/h	s	3.2
Top speed	km/h	> 200