

The new BMW R 1200 GS. Table of contents.



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1. The new BMW R 1200 GS. (Short version)



The new BMW R 1200 GS – even more supreme on all terrain types.

“BMW GS” has stood for universal motorcycling pleasure for more than 35 years: “GS” embodies the ideal combination of touring and long distance suitability, dynamic performance and off-road capability. This applies especially to the BMW GS motorcycles with a flat-twin boxer engine. They are the perfect companions in extreme conditions when it comes to exploring the most remote corners of the earth.

The unique overall concept of the R 1200 GS with its down-to-earth character and powerful high-torque engine thrills a large number of motorcycle fans all over the world. It is not for nothing that this motorcycle has dominated its market segment for many years and is the top-seller within the BMW Motorrad model range. With the new R 1200 GS, BMW Motorrad expands the GS portfolio not only in the form of additional product optimisations but also by means of further potential broadening of the motorcycle’s properties. For the first time, customers can give a BMW GS a more marked touch of enduro or distinguished style to suit its preferred area of use by ordering the style packages Rallye and Exclusive.

The most popular travel enduro bike in the world, the R 1200 GS has now been optimised in a wide range of areas. Designed for even greater versatility than before, it taps into a previously unknown breadth of properties, ranging from dynamic performance to comfort and off-road suitability. This is due to selective improvements, numerous new features and not least a much-expanded program of optional equipment and optional accessories.

Boxer engine with new catalytic converter and adapted data status in line with EU4 requirements.

Powered as before by the air/liquid-cooled boxer with an output of 92 kW at 7 750 rpm and a maximum torque of 125 Nm at 6 500 rpm, the new R 1200 GS now has an altered catalytic converter and a new data status for the engine management to meet the latest EU4 requirements. Model year 2017 already saw the addition of a judder damper on the transmission output shaft and a revision of the selector drum actuator and transmission shafts.

Riding Modes Pro with dynamic traction control DTC and new Hill Start Control.

For individual adaptation to rider preferences, the new R 1200 GS offers the two riding modes “Rain” and “Road” as standard in conjunction with Automatic Stability Control (ASC) for optimum traction. In addition the new R 1200 GS also comes with “Riding Modes Pro” featuring the additional riding modes “Dynamic” and “Dynamic Pro”, “Enduro” and “Enduro Pro” as well Dynamic Traction Control (DTC), which enables even more efficient and safe acceleration especially in banking position.

The riding modes “Dynamic Pro” and “Enduro Pro”, activated by means of a coded plug, also offer customisation options which allow the character of the motorcycle to be adapted. Other elements of “Riding Modes Pro” are the new set-off assistant Hill Start Control for convenient hill starts, ABS Pro for even greater safety when braking, even in banking position, and the dynamic brake light which is even more effective in drawing attention to the fact that the motorcycle is braking.

Electronic suspension Dynamic ESA “Next Generation” with fully automatic self-levelling suspension function.

A whole new dimension of riding safety, performance and comfort is harnessed with the optional BMW Motorrad Dynamic “Next Generation” Electronic Suspension Adjustment (ESA): here, the damping automatically adapts to the situation depending on riding condition and manoeuvres, and there is also an automatic self-levelling function to compensate all load states.

Tight sports suspension for off-road enthusiasts as an optional extra for the R 1200 GS Rallye.

The Rallye package available ex works allows the new R 1200 GS to be optimised for more ambitious off-road use. Off-road performance is significantly increased due to an increased spring rate (“harder suspension”), longer spring struts and extended spring travel.

New paint finishes and styling in three attractive variants.

While the underlying design architecture of the R 1200 GS has been preserved in the new version, optimised ergonomics in the knee area ensure further improved off-road qualities, while more pointed contrasts, new paint finishes and the two optional equipment packages Rallye and Exclusive emphasise the distinctive talents of the R 1200 GS in its differing forms. Details have been optimised on the front mudguard and at the centre of the front wheel cover, while small slipstream deflectors known as winglets add a touch of aerodynamic perfection. The trim of the air intake and the side fuel tank trim panels have been newly designed, too. New styling has now also

been applied to the cooling air ducts and radiator trim elements, which either feature a galvanised surface or are made of stainless steel (Rallye and Exclusive).

The off-road character of the new R 1200 GS is particularly emphasised in the Rallye version. The paintwork in Lupine Blue metallic, the over-painted deco elements on the fuel tank sides in BMW Motorsport colours and the frame in Cordoba Blue go together with the black drivetrain to create the sportiest series production GS of all time.

The sheer presence of the R 1200 GS Exclusive is underscored by means of fuel tank side trim panels in Monolith metallic matt with clear over-painted deco elements, a front wheel splash guard and central fuel tank cover in Iced Chocolate metallic and a frame finished in Agate Grey metallic matt. The black drivetrain and the gold-finished brake calipers lend a refined contrast here.

An overview of the highlights of the new BMW R 1200 GS:

- Boxer engine with new catalytic converter and adapted data status to meet EU4 requirements and an unchanged output of 92 kW at 7 750 rpm.
- New appearance with visually enhanced robustness.
- More marked styling and attractive colour variants.
- Even more ergonomics options with numerous seat heights and seat variants.
- Significantly wider spread of model variations in relation to the basic version, from the refined R 1200 GS Exclusive through to the R 1200 GS Rallye for riders with off-road aspirations.
- R 1200 GS Rallye – new version with additional product substance: Rallye seat, sports windshield, radiator and frame guard, wide enduro footrests and cross-spoke wheels as well as a professional sports suspension and optional studded tyres.
- Innovative functions provided by the latest generation of Dynamic ESA: automatic damping mode and automatic self-levelling suspension for a new riding experience.
- Riding Modes Pro with DTC, Hill Start Control and the new customisable modes Dynamic Pro and Enduro Pro come standard.
- New optional accessories such as cylinder protection bracket, topcase for two helmets and off-road protection parts as well as radiator guard and frame guard.

2. Motorcycle technology and design.



The new R 1200 GS: boundless boxer spirit and a broad scope of use at the very highest level.

The BMW R 1200 GS with water-cooled engine is the highest-volume GS to date. Since its market launch in 2013, it has impressed some 100 000 customers with its multiple talents. The new R 1200 GS now successfully broadens its range between sporty dynamic performance, touring comfort, long distance suitability and off-road use. The formula for this was greater diversity and an expanded program of both BMW optional equipment and Original BMW Motorrad Accessories tailored specifically to the needs of GS riders.

Rugged, distinctive boxer engine.

The new edition of the R 1200 GS once again has the distinctive air/liquid-cooled boxer with a capacity of 1 170 cc, an output of 92 kW at 7 750 rpm and a maximum torque of 125 Nm at 6 500 rpm. Key features of this power unit are the precision cooling, the vertical flow through the engine for efficient power yield and the 6-speed gearbox integrated in the engine housing with wet clutch. As before, the secondary drive is maintenance-free via the shaft drive, which is positioned on the left-hand side.

Taking into account the new EU4 regulations, the new R 1200 GS has been fitted with an altered catalytic converter and a new data status for engine management. The judder damper on the transmission output shaft, revised transmission shafts and a modified selector drum actuator are included in the area of power transmission.

Two riding modes, ASC and “Riding Modes Pro” with Dynamic Traction Control (DTC) come standard.

The new R 1200 GS has two riding modes for adaptation to individual rider preferences. Here, Automatic Stability Control (ASC) ensures a high level of riding safety due to the best possible traction. What is more, the riding modes “Rain” and “Road” allow adaptation of the bike's properties to most road surface conditions. Also available as a standard feature is “Riding Modes Pro” featuring the additional riding modes “Dynamic” and “Dynamic Pro”, “Enduro” and “Enduro Pro” and also Dynamic Traction Control (DTC). The latter enables even more efficient and safe acceleration, especially in banking position. The riding modes “Dynamic Pro” and “Enduro Pro”, activated by

means of a coded plug, also have customisation options which allow the character of the motorcycle to be adapted according to individual needs, thereby further enhancing riding fun.

In “Road” mode the engine offers a spontaneous response, while the control systems are set to ensure optimum performance on all roads. ABS set-up is geared towards road use and DTC offers optimum traction. If Dynamic ESA is fitted, the damping at front and rear is adjusted to the normal position. In “Rain” mode, throttle response is gentler and the settings of both DTC and ABS allow for a wet and therefore more slippery road surface.

Meanwhile “Dynamic” mode gives the rider a great opportunity to discover the athletic qualities of the new BMW R 1200 GS when it comes to road riding. The engine set-up is for direct throttle response, while a more restrained intervention of DTC enables experienced riders to perform light drifts. As before ABS Pro is set to road use. If the optional equipment item Dynamic ESA is fitted, tight damping allows the motorcycle’s full potential to be harnessed. In “Dynamic Pro” mode this sporty character of the new R 1200 GS is further enhanced in that the rider can freely select and combine the characteristics of throttle response and DTC regulation.

In “Enduro” mode the R 1200 GS reveals its full range of capabilities in the area of off-road riding. This mode offers a gentle engine response, while restrained DTC intervention allows an experienced rider to achieve deliberate, controlled rear wheel sliding. ABS characteristics are geared towards loose surfaces and road enduro tyres, while the Dynamic ESA set-up is adapted as appropriate to the purpose.

Ambitious enduro riders can tap into the full off-road performance of the new R 1200 GS in “Enduro Pro” mode. In this mode the rider can freely select and combine the characteristics of throttle response, DTC regulation and ABS. This mode is designed for use with studded tyres. At the same time, the ABS function is disengaged at the rear when the footbrake lever is activated and the optional Dynamic ESA shifts into a special off-road mode. The riding modes are selected at the press of a button within the menu structure.

Hill Start Control as a component of “Riding Modes Pro” for convenient operation and secure control in rough terrain.

Another element of “Riding Modes Pro” is the new Hill Start Control function. It prevents the motorcycle from rolling back on gradients by means of targeted intervention in the part integral BMW Motorrad ABS – without the rider constantly having to activate the brake lever. When Hill Start Control is activated via the handbrake lever, sufficient pressure is built up in the rear

brake system – depending on the gradient – so as to prevent the bike from rolling backwards.

“Riding Modes Pro” with dynamic brake light and ABS Pro for even greater safety on brake manoeuvres.

Other elements of “Riding Modes Pro” are the functions ABS Pro and dynamic brake light. The dynamic brake light can effectively signal to road-users behind that the motorcycle is braking. This additional brake light function, currently still limited to the EU and ECE region, warns traffic to the rear at two levels in the event of hard braking and even if an emergency stop is being performed. Level one is activated when the brakes are applied at speeds of up to 50 km/h. Here the brake light flashes at a frequency of 5 Hz. If the motorcycle approaches standstill (< 14 km/h), the second stage comes into effect, involving the additional activation of the hazard warning lights. These remain active until the vehicle accelerates back up to a speed of at least 20 km/h.

ABS Pro goes one step further than conventional ABS by offering increased safety when braking on bends in that ABS-supported braking is permitted in banking position. Here, ABS Pro prevents the wheels from locking even when the brakes are applied quickly; this reduces abrupt changes in steering force on shock-braking manoeuvres in particular and stops the motorcycle from rearing up unintentionally. The benefits of ABS Pro to the rider are increased brake and ride stability together with the excellent deceleration on bends.

BMW Motorrad Dynamic ESA “Next Generation” offers an optimum suspension set-up in all situations.

With a view to the bike’s wide range of use, BMW Motorrad’ latest generation of Dynamic ESA enables further enhancement of the dynamic riding experience, ride comfort and therefore the touring suitability of the new R 1200 GS. Dynamic ESA “Next Generation” opens up a whole new dimension in terms of riding safety, performance and comfort since damping is automatically adjusted to load state and manoeuvre, and there is also a riding position compensation. In terms of the technical background, signals from the rotational speed sensor and the two travel sensors at front and rear enable comprehensive data collection and therefore finely tuned adaptation of the motorcycle to the given situation.

In the damper characteristics set-up “Road”, damper adaptation is automatic across the entire riding range, offering maximum comfort and traction on all surfaces. The “Road” setting of the Dynamic ESA “Next Generation” provides optimum damping power at the suspension elements, whatever the riding situation or load.

The information transmitted by the rotational speed sensor with banking detection means that damping adaptation to the riding condition is even more finely tuned and precise. Based on additional measured parameters, the new R 1200 GS also detects riding states such as compression, acceleration and deceleration, and these are incorporated in the adaptation of damping forces at the rear spring strut as well as the Telelever front wheel suspension. This adaptation is applied by means of electrically actuated regulation valves within the millisecond range. As a result, optimum damping comfort and a very stable ride response is ensured even in banking position.

Dynamic ESA “Next Generation” is pre-set to the “Road” damping characteristics in the standard set-up of the riding modes “Rain”, “Road” and “Dynamic”. 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 in the riding modes “Rain” and “Road”. The tighter damping variant “Dynamic” is pre-set in the riding modes “Dynamic” and “Dynamic Pro”. Meanwhile the riding modes “Enduro” and “Enduro Pro” are set to the damper setting “Enduro”, geared towards the anticipated loose surfaces.

Self-levelling suspension function for automatic adaptation to the load state.

In developing the suspension, the main focus was on maximum comfort and optimum stability. Here, the term comfort refers to the aim of keeping the motorcycle superstructure as even as possible and ensuring maximum traction (ground contact) with the tyres. The load and the change in geometry this causes have a crucial impact on the motorcycle’s ride response in this connection.

Up until now, Dynamic ESA enabled automatic adaptation of damping to the riding situation in relation to the riding mode; the press of a button was required to conveniently set the load state – and with it the so-called suspension setting of the motorcycle – to solo, solo with luggage, and rider with pillion passenger. According to this previous method, however, the spring preload at the rear spring strut was altered in three stages.

Dynamic ESA “Next Generation” now goes one step further to achieving an optimum suspension set-up. As with the damping mode “Road”, the new function “Auto” allows automatic adaptation to the load state. Here, the spring rest (“spring preload”) is set across the entire range so that any lowering of the motorcycle resulting from increased rider weight, for example, is compensated for by raising the spring rest (“more spring preload”). This

adaptation is applied once the change in load has been detected after the motorcycle has set off.

The negative spring travel at the rear and therefore the riding position are thus returned to the optimum level. This leads to an excellently balanced suspension which sets the benchmark in terms of ride comfort, traction and riding dynamics.

While the normal position function “Auto” automatically provides the ideal riding position and therefore optimum ride response for all the relevant load states, the rider can also apply two other very useful functions relevant to the universal range of application of the new R 1200 GS called “Min” and “Max”. “Min” reduces the “spring preload” to a minimum by lowering the spring rest, thereby enabling a reduction of the seat height. Meanwhile the setting “Max” raises the spring rest as far as possible, thereby providing the greatest possible “spring preload”. The resulting high riding position especially benefits the rider of the new R 1200 GS off-road, when maximum ground clearance is required.

Sports suspension for the R 1200 GS Rallye as an optional feature ex works.

The optionally available Rallye package allows the new R 1200 GS to be optimised for more ambitious off-road use. Here, a perceptible increase in manoeuvrability and traction is combined with a very slight reduction in comfort and directional stability on the road. The increased spring rate (“harder suspension”), longer spring struts and therefore longer spring travel lead to a significant enhancement of ride stability for off-road use, which is especially noticeable over gravel passages.

This sports suspension benefits experienced off-road motorcyclists who know when to convert suspension reserves into more performance without overtaxing the motorcycle or themselves. Heavy and tall riders will appreciate the advantages of this spare capacity due to the tighter suspension set-up, especially when riding off-road. This optional equipment item, only available in conjunction with Dynamic ESA “Next Generation”, also includes all the new automatic damping functions and riding position compensation.

Optimised with new suspension geometry, the GS is now considerably more agile when it comes to carrying out tricky off-road manoeuvres. Increased ground clearance (approx. 20 mm) and the resulting additional seat height will be appreciated by experienced enduro riders who configure their GS precisely in this way for this type of riding. Proficient riders know how to move

dynamically over rough terrain on a travel enduro bike fitted with studded tyres, too, allowing for the weight of the motorcycle.

More pointed contrasts, new paint finishes and two equipment variants Rallye and Exclusive.

The basic architecture of the R 1200 GS has been preserved in the new edition. As before, the striking flyline runs from the front GS beak across the fuel tank and seat to the functionally designed rear. The rear section conveys a sense of agility and lightness, highlighting the bike's dynamic character with its rear frame finished in black.

Details have been optimised on the front mudguard and at the centre of the front wheel cover, while small slipstream deflectors known as winglets add a touch of aerodynamic perfection. The trim of the air intake snorkel and the side fuel tank side trim panels have been newly designed, too. New styling has been applied to the cooling air ducts and radiator trim elements, which either feature a galvanised surface or are made of stainless steel (Rallye and Exclusive).

Even in the basic version, the two paint finishes Lightwhite non-metallic and Blackstorm metallic clearly emphasise the fine tuning that has been applied to the body of the new R 1200 GS. The new segmentation of trim parts with the new radiator shroud underscores the bike's robust character. Meanwhile fascinating contrasts are created by the fuel tank side trim panels finished in Magellan Grey metallic matt in conjunction with the drivetrain and main frame in Aluminium Silver.

R 1200 Rallye: the sportiest standard GS of all times.

The off-road character of the new R 1200 GS is particularly emphasised in the Rallye version. The colouring in Lupine Blue metallic, the over-painted decor elements on the fuel tank sides reminiscent of the BMW Motorsport colours and in particular the frame powder-coated in Cordoba Blue go together with the black drivetrain and gold-finished brake calipers to create the sportiest standard GS of all times, even from a purely visual point of view.

Functionally speaking, the new R 1200 GS Rallye underscores its claim to be the sportiest GS with numerous refined details. These include the Rallye seat, which features perfect ergonomic shaping for maximum freedom of movement while still offering excellent seating comfort – for two if necessary. As before, a low-cut sports windshield provides a clear view of rough terrain to the front while offering increased freedom of movement when the bike is ridden standing up.

In addition to the radiator trim in robust stainless steel, a radiator guard protects the radiator from stone chip. Wide enduro footrests ensure a firm foothold and a special frame guard protects the section of the suspension in the boot area from unwanted scrape marks.

The new R 1200 GS Rallye rolls on cross-spoke wheel with off-road capability. Off-road enthusiasts can also opt for the sports suspension ex works. If the new R 1200 GS Rallye is to be ridden in purist form, i.e. with the luggage bridge removed and without passenger footrests, these elements can be neatly covered with caps that are included.

R 1200 GS Exclusive: refined style reflecting distinctive value.

In the Exclusive variant, the new R 1200 GS emphasises its distinguished appeal even visually with its finish in Iced Chocolate metallic. It is the distinctive motorcycle for those riders who have high expectations of an innovative, technically sophisticated product.

The refined and distinguished appearance of the R 1200 GS Exclusive is underscored by fuel tank side trim panels finished in Monolith metallic matt with clear over-painted tapes and a frame that is powder-coated in Agate Grey metallic matt. The black drivetrain and the gold-finished brake calipers provide a contrast here. The distinguished appeal of the new R 1200 GS Exclusive can be further enhanced with a selected program of BMW Motorrad optional equipment and Original BMW Motorrad Accessories.

3. Equipment program.



BMW Motorrad offers optional equipment and a wide range of Original BMW Motorrad Accessories for customisation. An extensive BMW Motorrad program is available to individualise the new R 1200 GS.

BMW Motorrad optional equipment is supplied directly ex works and integrated in the production process. Original BMW Accessories are installed by the BMW Motorrad dealer or by customers themselves. These are features which can be retrofitted, too.

R 1200 GS – standard equipment range.

- **Dynamic Package** comprises DTC, LED headlight, Hill Start Control, Shift Assistant Pro, Riding Modes Pro, ABS Pro, LED turn indicator.
- **Comfort Package** comprises chrome exhaust system, heated grips, Tyre Pressure Control RDC, hand protector.
- **Touring Package** comprises Dynamic ESA, Keyless Ride, On-Board Computer Pro, preparation for navigation unit, cruise control, case holder.
- Cross Spoke Wheels.
- Control Brake Light (Only with Dynamic Package).
- Daytime Riding lights (Only with Dynamic Package).

Price: R238,990

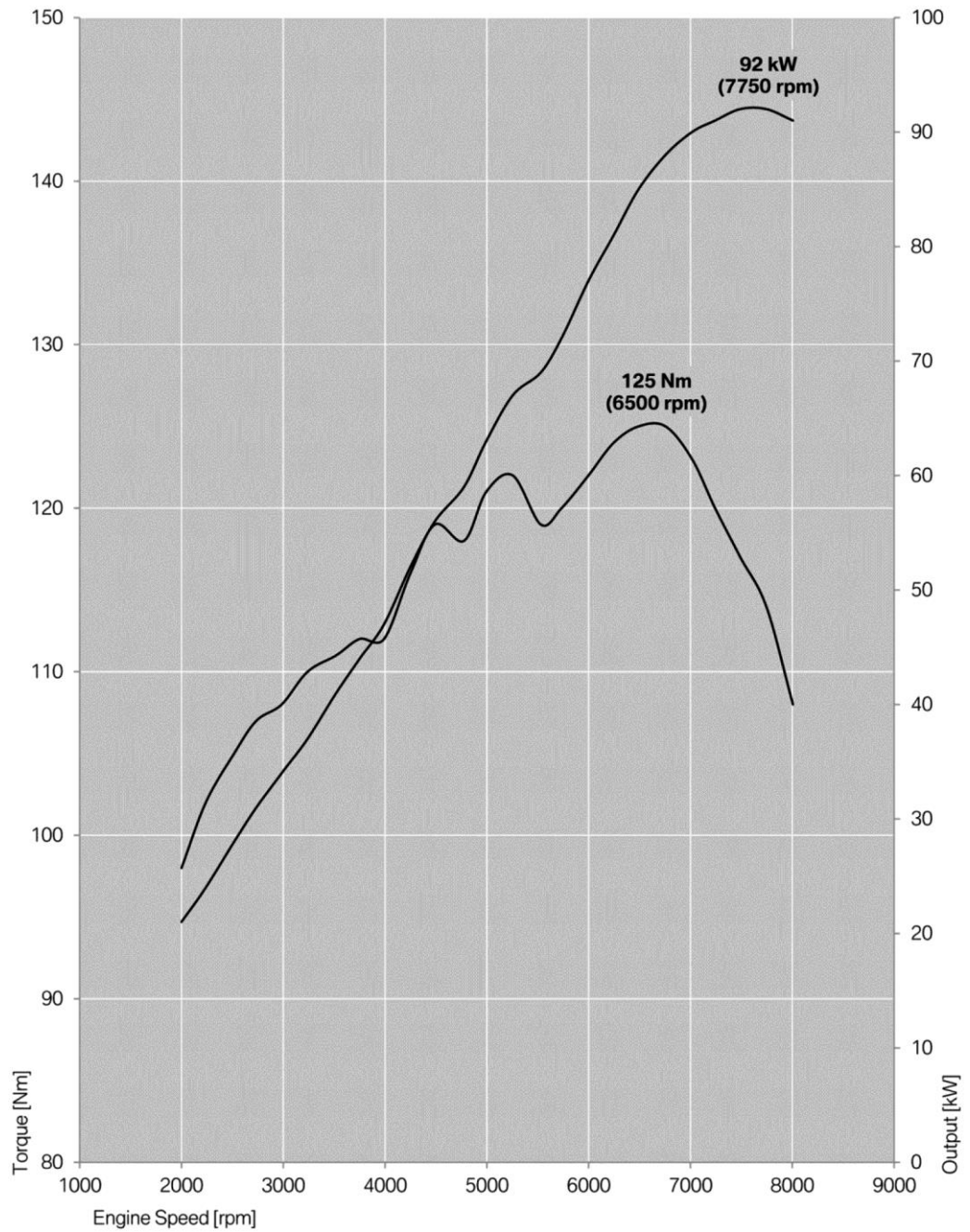
R 1200 GS optional equipment items which can be ordered individually.

- Sports suspension (BMW R 1200 Rallye). R4,900
- Suspension lowering. R3,750

Total Special Model Rallye (Windshield Sport, Powertrain Black, Lupin Blue Metallic) R 241 990

Total Exclusive Model (Powertrain Black, Iced Chocolate Metallic) R 241 990

4. Engine output and torque.



5. Technical specifications.



BMW R 1200 GS		
Engine		
Capacity	cc	1170
Bore/stroke	mm	101/73
Output	kW	92
at engine speed	rpm	7750
Torque	Nm	125
at engine speed	rpm	6500
Type	Air/water-cooled 2-cylinder opposed-twin engine	
No. of cylinders	2	
Compression/fuel	12.5:1 / premium unleaded (95 RON)	
Valve/accelerator actuation	DOHC	
Valves per cylinder	4	
Ø Intake/outlet	mm	40/34
Ø Throttle valves	mm	52
Carburation	BMS-X	
Emission control	Closed-loop three-way catalytic converter, exhaust standard EU4	
Electrical system		
Alternator	W	620
Battery	V/Ah	12/12 maintenance-free
Headlight	W	H7/LED (option)
Starter	kW	0.9
Power transmission - gearbox		
Clutch	Anti-hopping wet clutch	
Gearbox	Constant-mesh 6-speed gearbox	
Primary ratio	1.65	
Transmission ratios	I	2.438
	II	1.714
	III	1.296
	IV	1.059
	V	0.943
	VI	0.848
Rear wheel drive	Universal shaft	
Transmission ratio	2.91	
Suspension		
Frame construction type	Tubular steel bridge, self-supporting engine	
Front wheel suspension	BMW Telelever	
Rear wheel suspension	BMW EVO Paralever	
Total spring travel, front/rear	mm	190/200
Wheel castor	mm	99.6
Wheelbase	mm	1507
Steering head angle	°	64.5
Brakes	front	Hydraulically activated twin disc brake, Ø 305 mm
	rear	Single-disc brake Ø 276 mm
	BMW Motorrad Integral ABS (as standard, part integral, disengageable)	
Wheels	Light alloy cast wheel	
	front	3.0 x 19"
	rear	4.5 x 17"

BMW R 1200 GS		
Tyres	front	120/70 R19
	rear	170/60 R17

Dimensions and weights

Total length	mm	2207
Total width with mirrors	mm	953
Seat height	mm	850/870
DIN unladen weight, road ready	kg	244
Permitted total weight	kg	460
Fuel tank capacity	l	20

Performance figures

Fuel consumption		
according to WMTC	l/100 km	4.96
Acceleration		
0-100 km/h	s	3.6
Top speed	km/h	200
