

BMW Motorrad  
Enduro



The Ultimate  
Riding Machine

R 1200 GS

# R 1200 GS

The Fascination of Freedom.



At the very top the air gets thinner.



When you've been at the top for 25 years, staying there can be tough. But this is the challenge that the BMW Motorrad engineers accepted, when they set out to ensure that the R 1200 GS would be the world's best touring enduro, leading where others can only follow. This is a motorcycle that follows in the tradition of its illustrious predecessor by being the ultimate motorcycle on and off the road, but at the same time is significantly different from the earlier model: this is particularly felt in the 12% weight reduction and the 15% increase in engine power. These are just some of the qualities that make

it easily the best BMW touring Enduro of all time – just as easily as it reaches the most remote parts of the planet. Off-road it provides precisely controllable power, on the asphalt its agility is striking. And it hardly accepts any limits, which is why it has proven capabilities in a country in which the most diverse climate zones and powerful landscapes make everyday life an adventure – Peru. On the BMW R 1200 GS, the desire to travel gains a whole new dimension.

The areas shaded dark brown are at an altitude of 3,000 metres – such as Cuzco, the capital of the former Inca empire, with an altitude of 3,399 metres. In the north west, the towering massif of the Cordillera Vilcabamba is to be found, with the 6,271-metre Nevado Salkantay and the 5,917-metre Nevado Humantay.



Nature may be more powerful,  
but it cannot control its power.

Every experienced explorer knows that if you want to measure up to the powers of nature, you have to be able to count on your own strengths and ration your energies. This is performed most effectively by the boxer engine of the BMW R 1200 GS. After all, it delivers 74 kW (100 bhp)<sup>1)</sup> and its maximum torque is an impressive 115 Nm; with its BMS-K electronic engine management system, this performance can be felt even from idling speed.

<sup>1)</sup> 72 kW (98 bhp) in Germany

Peru is well-known for its icy mountain lakes with crystal-clear deep blue water. Lake Titicaca is not only the highest navigable body of water in the world but also the largest lake in South America, with a surface area of 8,288 km<sup>2</sup>.





At 5,200 metres rain turns to snow – even in the tropics. But what does it matter? The fascination and challenge remains.

Climbing the mountain is one thing, getting back down into the valley is quite another. A braking system shows its qualities especially when decelerating in extreme situations. This is why the BMW R 1200 GS has a precisely controllable brake on the front wheel. On the road use, the use of the new-generation BMW Motorrad Integral ABS (partially integral version) is recommended, but the system can be deactivated for off-road use.



The average temperature in the summer months from December to April is around 25°C. But the South American winter from June to September is suitable for a trip to Peru because of its low precipitation, sunny weather and mild daytime temperatures. However, night-time temperatures in the mountains usually drop below zero, and snow can often fall too.



When your hunger for freedom becomes insatiable,  
this chassis does whatever you want it to.



Gravel, potholes or paths across petrified lava used to be tough for any rider and bike. All that changes with the BMW R 1200 GS: it has specially modified versions of the patented BMW Motorrad Telelever and the BMW Motorrad Paralever with WAD spring strut (travel-related damping). The rear wheel drive and torque support have been specially designed for the BMW R 1200 GS. The entire unit is extremely light, yet highly robust. So even where there is no road, you still have excellent riding conditions.



Peru's landscape was chiefly formed by its volcanoes, and the rubble which covers the entire plateau is of volcanic origin. Peru also has some of the deepest canyons in the world, such as the Canyon de Colca north of Arequipa – the deepest gorge in South America.



A great day:  
you get up early and don't get to sit down until the evening.

New challenges wait on the horizon. Skill and riding ability are ably supported by the ergonomics of the BMW R 1200 GS. For both sitting and standing, it offers the very latest features, including a seat of ideal shape and width with a choice of two height positions, and adjustable hand levers for clutch and brake.



To conquer the world, you  
have to master its roads.

It's not just off the beaten track where the R 1200 GS is unbeatable. Its power and manoeuvrability are equally invaluable on tarmac too. Because this really is a motorcycle that knows how to take the rough with the smooth.

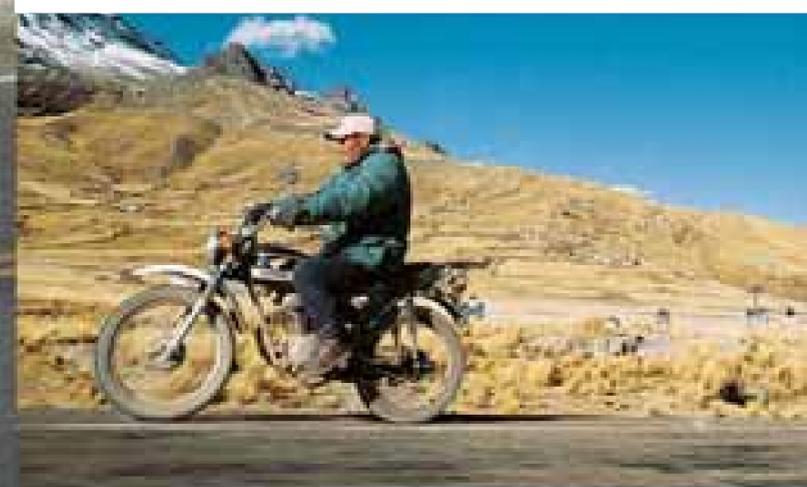


Narrow but well asphalted roads wind their way through the rough and desert-like landscape along the west coast. Surrounded by the barren mountain ranges and running directly past steep slopes, the area offers spectacular views into the depths. One quickly becomes fascinated by the distinctive, primeval character of this landscape.



## Every stamp in your passport confirms freedom unlimited.

Put your quest for travel in your luggage and off you go. For tours on the BMW R 1200 GS the unique Vario panniers and Vario topcase are available. Due to the cleverly designed and simple mechanical system, the volume of panniers can be altered by 9 litres, and the volume of the topcase by 7 litres.





At 3,810 metres above sea level, Lake Titicaca is the highest navigable lake in the world.



The little villages on the elevated plains have one thing in common. As soon as you arrive on your motorcycle, you are surrounded by children within minutes. The rest of the village follows a little later.

## Everyday life in Peru: mountains, jungle, desert and sea.

Of the 109 vegetation zones worldwide, Peru has 84 spread across three climate zones: Sierra – the vast mountain ranges of the Andes, Selva – the rain forest of the Amazon region, and Costa – the narrow strip of coastline along the Pacific Ocean with its deserts.

One of the most dangerous mountain passes in the world is a well-guarded secret amongst extreme Enduro riders: it runs from Cuzco to Quillabamba. Even for professional riders, this tour can only be undertaken successfully in the winter months. During the rest of the year, sudden rainfall transforms the track into a mud slide, passing terrifying abysses. If you still haven't quenched your thirst for

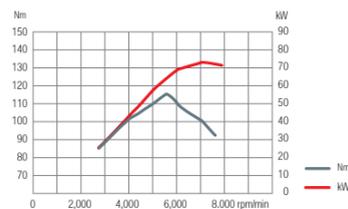
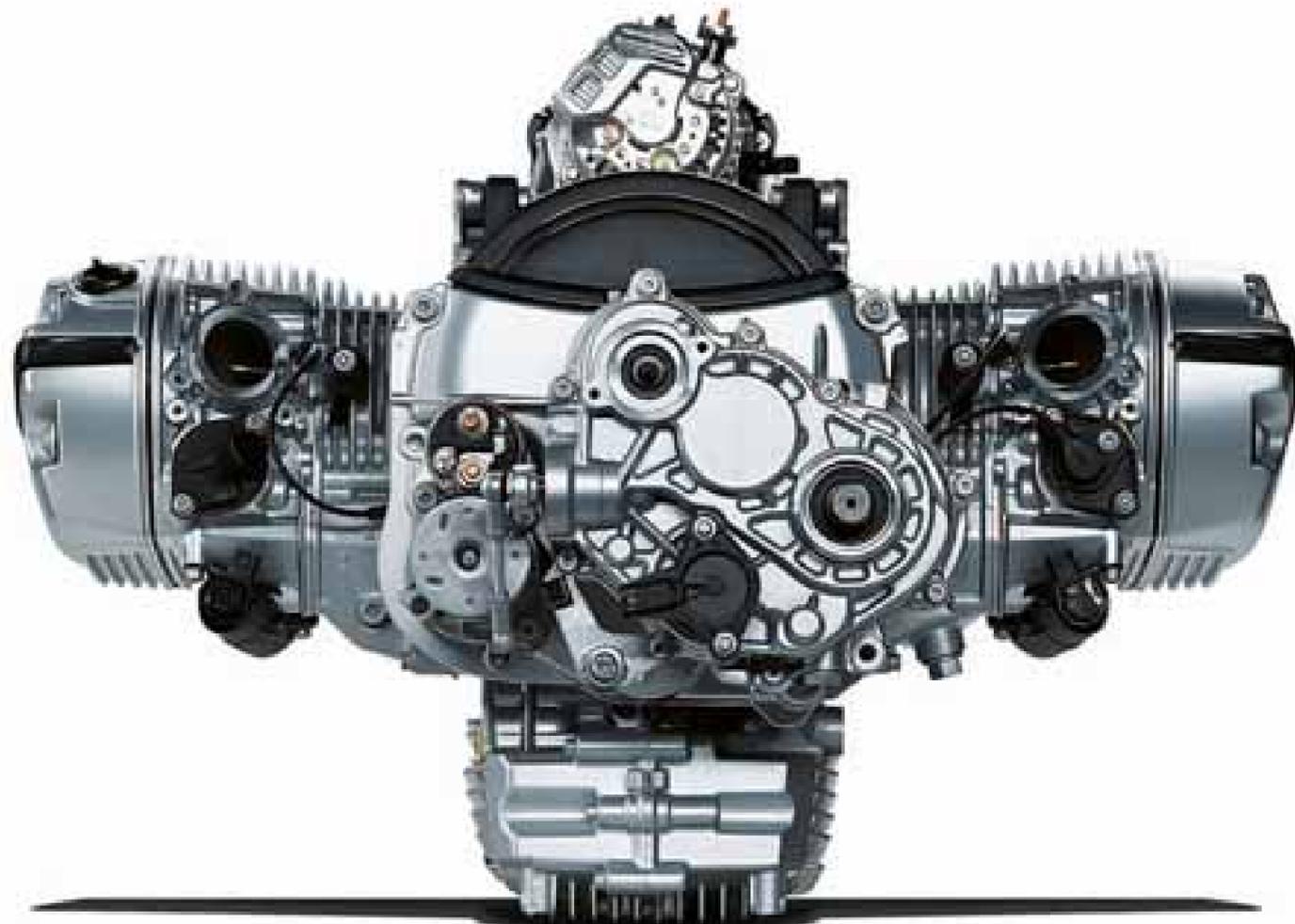
mountain air after this trip, there is plenty more between Cuzco and Puno. The road winds up the Andean slopes to 5,000 metres. You may even come across a motorcyclist pushing his bike for the last few yards to the top – not surprising since the carburettor literally runs out of air at this height. With petrol injection and digital engine management, the BMW R 1200 GS enables the rider to set his sights higher. On the way to Arequipa you can drift for hours through the bends along miles of gravel tracks. The only interruption is crossing craggy gorges, where consummate skill is required. Desert and sand dunes stretch for over 150 kilometres beyond Nazca. This area is amongst the driest in the world, and a new companion joins the trip: thirst.

Technology  
Enduro  
rider equipment  
Special equipment  
Accessories  
Colours and  
specifications

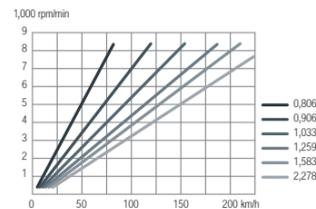
Enduro  
R 1200 GS



The best boxer of all time.



Power and responsiveness: an output of 74 kW (100 bhp)<sup>1)</sup> at 7,000 rpm, and a maximum torque of 115 Nm at 5,500 rpm.



The gear diagram shows the optimum gradation of the individual gears. The active 6th gear is no longer an overdrive.

<sup>1)</sup> 72 kW (98 bhp) in Germany

**An absolutely reliable travel companion.**

The heart and soul of the R 1200 GS is its state-of-the-art boxer engine. By means of a focus on lightweight construction, the weight has been drastically reduced in spite of the addition of a balancer shaft. At the same time the engine has a significantly more extensive sensor system, providing greater power via the BMS-K engine management system and a lower level of fuel consumption. This electronic engine management system also replaces a separate choke. Knock sensors and the further development of the dual ignition ensure optimum combustion, providing refinement even at low engine speeds. In the range between 5,000 and 8,000 rpm, the new engine delivers impressive dynamic performance and power, while vibrations are effectively eliminated by the balancer shaft. The power and dynamic performance of this highly cultivated engine make for a thrilling riding experience.

**More power, less weight.**

The boxer engine in the BMW R 1200 GS is 15 per cent more powerful than the previous generation of BMW boxers, while weighing 12 per cent less, and the 74 kW (100 bhp)<sup>1)</sup> it generates provides powerful acceleration for the 225-kilogram<sup>2)</sup> motorcycle. The virtues of the boxer principle now come even more strikingly into their own: the new boxer engine has a maximum torque of 115 Nm and silken-soft pulling power from idle.

**Record-breaking braking distances.**

The successful BMW Motorrad brake system has been specially adapted for the BMW R 1200 GS. For example, the piston diameter of the front brake caliper has been enlarged from 34 to 36 mm and for the rear from 26 to 28 mm in order to lessen wear and tear. The brake line distributor for the two front brake calipers is elegantly integrated into the lower fork bridge. The new version of BMW Motorrad's Integral ABS system, which weighs 50 per cent less than its predecessor, is fitted as standard. Riders can now exercise even more precise control, thanks to the linear relationship between lever pressure and braking force. No more maintenance is required than would be for a motorcycle without ABS, and power consumption has also been reduced. The popular integral function (partially integral version) has been retained in the new system, meaning that braking can still be applied to both wheels via the handlebar lever, or solely to the rear wheel via the footbrake.

The new ASC<sup>3)</sup> (Automatic Stability Control) makes motorcycling even safer. Fitted in conjunction with BMW Motorrad Integral ABS, this rider aid prevents wheelspin. When riding in adverse conditions, for example on wet or uneven surfaces, ASC significantly improves the stability of the motorcycle, and with it the safety of the rider. However, even ASC can't defy the laws of physics, and when it is activated, riders need to exercise some caution – especially when accelerating hard and leaning into corners. And if you don't want the electronics to intervene, the system can be deactivated at the touch of a button, even while the bike is in motion. ASC also features a special off-road setting, which allows for more slip-page on loose surfaces.

<sup>1)</sup> 72 kW (98 bhp) in Germany  
<sup>2)</sup> Unladen weight, road-ready, fully fuelled  
<sup>3)</sup> Available from start of 2007

**A mean machine that's also green.**

Dual ignition and the new BMS-K engine management ensure a particularly even and effective combustion process – one requirement for low fuel consumption and exhaust emission figures. In addition, two oxygen sensors combined with a closed-loop three-way catalytic converter allow a further reduction of pollutant emissions. And as you would expect, the BMW Motorrad shows evidence of its pioneering role in environmental matters. After all, the BMW R 1200 GS fulfils the new EU-3 exhaust emission norms.

**Perfect interconnections.**

The gearbox of the BMW R 1200 GS provides numerous advantages: the helical gears enable a particularly smooth contact, thereby reducing running noise. Gear shifts are fed in via special sliding sleeves; in conjunction with the shift unit, this ensures easy shifting with short travel and very little physical force.



A tough character. The chassis.



The specially designed lightweight steel handlebars are state-of-the-art, hardly passing on any irritating vibrations.

The entire brake system of the BMW R 1200 GS is fitted with steel flex brake lines, since these ensure that the pressure point remains stable even when subjected to strain over a long period.

The BMW Motorrad Telelever gives the suspension a finely tuned response even when powerful longitudinal and transverse forces are acting on the vehicle.

The short, oval end silencer is perfectly adapted to the boxer engine and also highlights the bike's sporty appearance.

The torque strut is now attached to the swing arm, thus increasing ground clearance.

The small rear-axle gearbox and the hollow rear axle minimise the unsprung masses.

The BMW Motorrad Paralever takes care of power transmission and rear wheel guidance. The shaft drive runs inside the swing arm in classic style – a particularly low-maintenance design.

**Perfect for the ideal line.  
The BMW Motorrad Telelever.**

An especially light version of the patented BMW Motorrad Telelever is used in the BMW R 1200 GS. It combines the advantages of both the telefork and swing arm construction. In conjunction with the central strut, this perfectly fulfils all demands of the front wheel guidance. The spring pre-load is adjustable to nine levels and with a travel of 190 mm provides plenty of leeway even off-road. On the road, the BMW Motorrad Telelever has an impressively sensitive response and offers a high level of longitudinal stiffness as well as excellent ride and directional stability right up to top speed. What is more, brake squat is reduced to a minimum – excellent conditions for the BMW Motorrad Integral ABS to take optimum effect.

**First class at the rear too.**

The BMW Motorrad Paralever combines the functions of rear wheel guidance and power transmission. The torque support, which minimises load-change reactions, is mounted above the swing arm, thus improving off-road capabilities. Due to the reduced gearbox rotational speed, the rear-axle gearbox is exceptionally compact and light. The rear axle and swinging arm likewise take advantage of innovative lightweight construction techniques to minimise unsprung mass. The chassis thus reacts extremely quickly to impacts. The suspension and damping functions are performed by a WAD strut (travel-related damping). With this system, the damping of the compression stage increases with the spring travel. With a travel of 200 mm, this makes for a highly sensitive response and impact

reliability under the extreme stresses encountered in off-road riding. The system delivers outstanding comfort and optimum ground contact, whether you are riding solo or with a passenger and luggage.

**Stability which is not an additional burden.**

The engineers only considered one material for the frame of the BMW R 1200 GS: steel. The triple-section frame concept consists of a front and rear frame with an engine-gearbox unit as a load-bearing element. In order to increase chassis rigidity, the swing arm is mounted directly in the rear frame. The grid tubing steel frame is an outstanding example of stable, lightweight construction. With varying thicknesses and tube diameters, the elements are perfectly adapted to the relevant strains and pressures. In this way, stability and weight reduction have been fundamentally improved.



## Daylight at night. The headlamps.

The BMW R 1200 GS shows its membership of the GS boxer family with its striking, asymmetrical dual headlamps. Here, the reflectors are designed as free-form surfaces covered with a clear glass cover. The intelligent design of the reflectors means that lighting efficiency is excellent, with good recognisability of the vehicle by other road users and outstanding road surface illumination – a safety bonus for both day and night riding.

## Riding into the information age.

The analogue instruments, speedometer and tachometer are electronically controlled in the BMW R 1200 GS. In the cockpit, there is also a large Info Flatscreen which provides feedback on remaining range, fuel tank content, oil temperature, gear currently engaged, mileage and time. Lighting conditions are immaterial since the instrument lighting switches on automatically.

## The information flow is designed to suit the rider.

For BMW Motorrad, the rider is the star of the show. This is why the very latest in ergonomics goes into model development so as to integrate the rider perfectly into the machine. One example is the design of the seat. As well as leg length, the leg arch is also taken into account. With the same seat height, the BMW R 1200 GS thus offers significantly improved ground reachability and thus safe standing. The narrow seat area also allows an ideal knee grip for riding in a standing position. In addition to the height-adjustable standard seat, high and low seat options are also available as accessories.

The height variation can be manually adjusted to two levels. A suitable rider seat height between 820 and 900 mm can thus be selected. This flexibility is exemplary within the motorcycling world. The BMW R 1200 GS is also fitted as standard with a main stand in addition to the side stand. The wind-tunnel-optimised windshield has five manual adjustment positions for tilt angle and offers riders of all builds excellent wind protection. The diameter of the grips has been much reduced. The clutch lever and switches are designed according to ergonomic principles. The reduced physical force required to operate the brake, accelerator and clutch make riding the motorcycle easier and thus make an important contribution to active safety.



## Maximum sporting performance.

BMW Motorrad's new Enduro helmet gives off-road riders everything they could wish for. Its aerodynamics have been optimised in extensive wind-tunnel testing to minimize buffeting and helmet lift, even with a peak fitted. It is available in three configurations – with peak and visor, without a peak but with a visor (suitable for motorway riding) or with a peak and without a visor (for off-road use) – and it is designed so that the visor can easily be opened and closed even with the peak fitted. Safety features include a glass fibre/carbon/Kevlar laminated shell, and an integrated neck/chin strap to hold the helmet in place in the event of a crash.

## Factory-fitted optional equipment.



Safety guaranteed: The new BMW Motorrad Integral ABS, in the partially integral version for sports-style riding. Can be deactivated for off-road use.



The TPC (Tyre Pressure Control) system uses sensors to constantly monitor the pressure. If the pressure falls below a certain level, the driver is immediately notified via the display and/or a warning light.



The anti-theft warning system reacts to every change in position with a clearly audible warning signal and flashing light.



The solid pannier holders in high-quality plastic are perfectly integrated into the slim rear design. Also available as an accessory.



Hand protectors protect riders' fingers from branches, flying gravel and the weather in off-road riding.

The extensive range of original BMW Motorrad special equipment offers every rider the option to adapt his machine to his own needs and equip it according to his own preferences:

Other optional equipment available includes:

- Cross-spoke wheels
- Chrome-plated exhaust
- Low seat
- White indicators <sup>1)</sup>
- White LED indicators <sup>2)</sup>
- ASC (Automatic Stability Control) <sup>3)</sup>
- On-board computer
- Heated grips

### Four wheels. This motorcycle must be unique.

Two wheel variations are available for the BMW R 1200 GS. The die-cast wheels come in a double-spoke construction. Their weight advantage is particularly felt in handling on bends. This makes them the first choice for on-road use. Nonetheless, the occasional foray into light off-road terrain is not a problem.

For anyone wishing to use the BMW R 1200 GS more in challenging off-road areas and with a preference for Enduro styling, BMW Motorrad recommends the optional cross-spoke wheels, which are designed so they can also be used with tubeless tyres.



<sup>1)</sup> Available until February 2007  
<sup>2)</sup> Currently under development  
<sup>3)</sup> Available from start of 2007

## Accessories from your BMW Motorrad dealer.



The waterproof vario pannier features a patented adjustment mechanism. The volume can be reduced from a total of 68 litres (29 litres left, 39 litres right) to 50 litres (20 litres left, 30 litres right). This is particularly advantageous in city traffic, since this reduces the width by 120 mm.



Waterproof Vario topcase. Can be attached to the luggage rack using an adapter plate, or fastened to the pillion seat for better weight distribution. Capacity expandable from 25.5 to 32.5 litres.



The practical inner bags are particularly waterproof due to their bonded inside surfaces; they facilitate loading and unloading of panniers and topcase. They can be varied in volume to fit panniers and topcase by means of all-round zips.



The fuel tank rucksack with large map compartment defines a new standard of waterproofing with its bonded inner area. The Teflon layer reduces soiling. A removable hip bag is integrated.



The 100-per cent titanium sport silencer from Akrapović® weighs just 2.2 kg, but what it lacks in weight, it makes up for with the fullness of its sound.



The robust engine protection bracket with its stable steel tube construction offers protection from damage in the cylinder area on rough terrain.



BMW Motorrad offers two additional seats for the R 1200 GS as special accessories: the adjustable high rider seat (880 mm to 900 mm) and the low seat (820 mm). Together with the adjustable standard seat (840 to 860 mm), seats are thus available in heights ranging from 820 to 900 mm – unique in the world of motorcycling. All seats are available in black or grey.



Stay on course, wherever you're headed, with the Bluetooth®-enabled BMW Navigator. It combines four functions – route planner, GPS receiver, compass and trip computer – into a single device. And thanks to the battery pack, you can take it with you even when you're not on your R 1200 GS.

The following other accessories are available for retrofitting from your BMW Motorrad dealer:

- Attachment plate for Vario topcase
- Pannier holders<sup>3)</sup>
- Backrest for Vario topcase
- Inner bags for Vario panniers and Vario topcase
- High seat (880 and 900 mm)
- Low seat (820 mm)
- Valve cover protection, aluminium
- Second vehicle socket
- Anti-theft alarm system
- Hand protectors<sup>3)</sup>
- Cylinder protection
- TPC<sup>1)</sup>
- White indicators
- White LED indicators<sup>2)</sup>

<sup>1)</sup> Currently under development

<sup>2)</sup> Available from early 2007

<sup>3)</sup> Fitted as standard on models sold in the UK

## Colours and technical data.



Paintwork: granite grey metallic  
Seat: black (also available in grey)  
Side covers: black (also available in granite grey metallic)



Paintwork: midnight black  
Seat: grey (also available in black)  
Side covers: granite grey metallic (also available in black)



Paintwork: rock red  
Seat: black (also available in grey)  
Side covers: black (also available in granite grey metallic)



Paintwork: desert yellow metallic  
Seat: black (also available in grey)  
Side covers: granite grey metallic (also available in black)

You can design your BMW R 1200 GS with 4 standard bodywork colours and two side cover and seat colours. So in total 16 different combinations are possible.

### Engine

Type	Air/oil-cooled 2-cylinder 4-stroke engine, one camshaft, four valves per cylinder, central balancing shaft
Bore x stroke	101 mm x 73 mm
Capacity	1,170 ccm
Rated output	74 kW (100 bhp) <sup>1)</sup> at 7,000 rpm
Max. torque	115 Nm at 5,500 rpm
Compression ratio	11.0:1
Carburation/engine management	Electronic intake pipe injection, digital engine management BMS-K with fuel cut-off, dual ignition
Emission control	Closed-loop 3-way catalytic converter, compliant with EU-3 emission standard

### Performance/fuel consumption

Maximum speed	Over 200 km/h
Consumption over 100 km at steady 90 km/h	4.3 l
Consumption over 100 km at steady 120 km/h	5.5 l
Fuel type	Super unleaded, 95-octane (RON). 91-octane fuel can however be used with automatic knock control.

### Electrical system

Generator	600 W 3-phase alternator
Battery	12 V/12 Ah

### Power transmission

Clutch	Single-disc dry clutch, hydraulically operated
Gearbox	Constant-mesh 6-speed gearbox with helical gearing
Drive	Shaft drive

### Chassis/brakes

Frame	Two-part frame consisting of front and rear section with load-bearing engine-gearbox unit
Front wheel location/suspension	BMW Motorrad Telelever, stanchion diameter 41 mm, central strut, mechanically adjustable between five settings
Rear wheel location/suspension	Die-cast aluminium single-sided swing arm with BMW Motorrad Paralever, central strut with travel-dependent damping, mechanically adjustable between five settings via handwheel, adjustable rebound damping 190 mm/200 mm
Travel front/rear	
Wheelbase (unladen as per DIN standard):	1,507 mm
Castor (unladen as per DIN standard):	101 mm
Steering head angle (unladen as per DIN standard):	64.3°
Wheel material:	Cast aluminium
Rim, front	2.50 x 19"
Rim, rear	4.00 x 17"
Tyre, front	110/80 - R19
Tyre, rear	150/70 - R17
Brake, front	Brake system with dual disc, floating brake discs, diameter 305 mm, 4-piston fixed calliper
Brake, rear	Single disc, floating brake disc, diameter 265 mm, double-piston floating calliper
ABS	BMW Motorrad Integral ABS in (partially integral version) disengageable

### Dimensions/weights

Seat height, unladen	840 mm/860 mm (high seat 880 mm/900 mm, low seat 820 mm)
Rider step length, unladen:	1,860 mm/1,900 mm (high seat 1,940 mm/1,980 mm, low seat 1,820)
Unladen weight, road ready, fully fuelled <sup>2)</sup>	225 kg
Dry weight <sup>3)</sup>	199 kg
Permitted total weight	435 kg
Max. load (with standard equipment)	210 kg
Usable tank volume	20.0 l
Reserve	approx. 4.0 l
Length	2,210 mm
Height (not inc. mirrors)	1,430 mm
Width (inc. mirrors)	915 mm

<sup>1)</sup> 72 kW (98 bhp) in Germany

<sup>2)</sup> As defined in EU directive 93/93/EEC, filled with all operating fluids, fuelled to at least 90% of useable tank capacity

<sup>3)</sup> Unladen weight without operating fluids

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Enduro



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