The new BMW R 1200 GS.
Contents.

1. The new BMW R 1200 GS.

An overview of the new BMW R 1200 GS:

- Even more dynamic drive with more pep in the upper half of the rev range.
- Engine power increased by five percent.
- Maximum engine speed increased to 8000 rpm and wider usable speed range.
- Different gear and secondary transmission ratios for clear improvement in traction and acceleration.
- Redesigned six-gear transmission with enlarged bearing diameters and optimised switching kinematics for even more precise gear shifting.
- Electronic chassis modification from the optional enduro ESA, used for the first time in an enduro. Further increase in agility, suitability for touring and offroad use through individual spring-suspension coordination.
- Electrohydraulic spring adjustment of the spring struts at front and rear as part of the enduro ESA.
- Optimised ergonomics through new, double-butted aluminium handlebar in combination with new hand protectors and newly designed seat.
- Fuel display with expanded measurement range and new sensor system.
- Optimised battery charged with higher generator performance.
- More dynamic design underlining the enduro attributes.
- Colours available: Titanium Silver Metallic, Dark Slate Metallic Matt, plain Namibia Orange, plain Tanzanite blue
- Special equipment and tailor-made accessories in accordance with the familiar BMW standards.

Stronger, livelier and more agile –
for even more driving enjoyment onroad and offroad.

With the new BMW R 1200 GS, BMW is writing another chapter in the success story that started in 1980 with the BMW R 80 G/S. More than ever before, the new, comprehensively reworked R 1200 GS meets the requirements that the ideal travel enduro should meet. It offers superb performance, maximum comfort and a wide range of uses on the longest trips and, with its even better acceleration and agility, guarantees maximum enjoyment on twisting country and mountain roads. The optimised chassis and suspension properties guarantee the best possible handling both on and off road.

The predecessor model – the R 1200 GS presented in 2004, of which over 75,000 were produced – already embodied an incredibly harmonious synthesis of offroad and onroad characteristics. And yet the new version outstrips its predecessor, still acknowledged as outstanding, in every major respect.

A torsion-proof chassis, the front wheel suspension with the unique BMW Telelever and rear wheel suspension with the BMW Paralever still offer first-class, safe handling. Extremely efficient brakes combined with the BMW Motorrad Integral ABS ensure maximum safety even in critical driving situations, and excellent environmental compatibility is achieved through cutting-edge exhaust purification with a regulated three-way catalytic converter.

And let's not forget the maintenance-free cardan drive, which means that there is no need for maintenance work, which can be both unpleasant and time consuming on extended trips and long-distance tours in particular. As is traditional, BMW is once again also offering a reliable, ingenious luggage system for the new R 1200 GS, plus further made-to-measure accessories and special equipment.

The new engine – more powerful, higher revving and more dynamic.

In terms of its design principle, basic structure, power transmission and mixture preparation, the engine in the new R 1200 GS is based on that of the R 1200 R. However, improvements have been made in the area of engine management for use in the R 1200 GS as regards the special requirements that a large-volume travel enduro has to meet.

Whilst the 1170 cm^3 boxer engine in the predecessor model offered superb power development in all conditions and situations, the new R 1200 GS can give a fair amount more in this respect. With a power of 105 HP, a maximum engine speed increased to 8000 rpm, giving an even wider engine speed

range, plus completely revised transmission ratios, it is even more dynamic than before, with more acceleration in the upper half of the speed range, and thus even better traction over the whole range. In combination with the reworked six-gear transmission, the new R 1200 GS thus offers the most dynamic performance of all the travel enduros.

Like the models to date, the new, 12:1 compressed R 1200 GS can still be operated with 95-octane fuel. Normally designed for lead-free Super petrol (RON 95), the engine can also be operated with normal petrol (RON 91) without manual intervention, thanks to its knock control.

Redesigned transmission and new shift kinematics for even more dynamic driving and more precise gear shifting.
The redesigned six-gear transmission with increased bearing diameters and modified shaft distance take account of the increased engine power, expanded engine speed range and sometimes extreme conditions of use of the R 1200 GS on long-distance trips in particular.

A modification of the transmission ratios to the more dynamic engine characteristics and a shortening of the secondary transmission from i = 2.82 to i = 2.91 are reflected in the clearly increased propulsion in the upper half of the engine speed range and increased traction at low and medium engine speeds.

Following the redesign of the transmission, the R 1200 GS was also provided with an optimised shift mechanism with improved force-displacement for even more precise gear shifting and transparent feedback.

Chassis modification through the optional enduro ESA – further increasing agility, suitability for touring and offroad use
Around three years after the totally successful launch of ESA (electronic suspension adjustment) as a special equipment item for the K 1200 S in 2004, this technology is now moving into the enduro segment for the first time with the new R 1200 GS. With its incredibly broad range of uses and the resultant very varied demands made on it, the R 1200 GS is almost destined to use this unique chassis technology. Designed to meet the special needs of a travel enduro, the enduro ESA, which can be provided as special equipment ex factory, allows the chassis to be simply modified to various operating conditions and load situations simply by pressing a button.

The ESA used in the K 1200 S provided both for the electronically controlled suspension modification of the two spring struts of the Telelever at the front and the Paralever at the rear and for the adjustment of the rear spring base;

however, the enduro ESA, with the additional electrohydraulic adjustment of the spring base at the front spring strut, takes account of the specific requirements of a travel enduro. This gives much better impact resistance in offroad use without any of the associated disadvantages in on-road use, such as reduced negative spring travel or increased seat height. In this way, the successful concept of the R 1200 GS has been improved still further in terms of agility, suitability for touring and offroad quality.

Enduro ESA with onroad and offroad settings – ideally suited to the purpose.

The electronic suspension adjustment Enduro ESA distinguishes between onroad and offroad modes, within which, the driver can make further adjustments to the specific requirements by selecting particular modes for the spring basis and suspension.

Extended pressing of the ESA button changes from one springing mode to other, and pressing the button for a short time makes changes within the suspension modes.

Onroad modes: By pressing a button, shown in the display by corresponding symbols, the driver can choose between three different load states: “driver only”, “driver with luggage”, and “pillion use”, which produces a corresponding lifting of the spring base of the rear spring strut. Each of the three load states can also be combined with three different suspension modes: “Sport”, “Normal” and “Comfort”. In all onroad modes, the spring base adjustment of the spring strut at the Telelever at the front is in the “Minimum” setting.

Offroad modes: For offroad use, the enduro ESA offers two modes for springing, which can each be combined with one of three suspension modes. The spring base mode “Medium reserves”, shown by the “round hill” display symbol, increases the spring base of the suspension strut at the Telelever at the front to 50%, and the rear spring strut is adjusted to the same value. This setting is suitable for both slow and fast offroad travelling where large shelves, holes and impacts are likely. “Maximum reserves”, shown by the “pointed hills” display symbol, increases the spring base at both the front and rear spring strut to 100 % and is suitable when maximum impact safety is required. In this setting, the ground clearance is also increased by 2 cm in comparison with the onroad setting.

The two modes for the spring base can be combined with the three suspension modes “Soft”, “Norm” or “Hard”. Whilst “Soft” is suitable, for example, for trial sections to be driven slowly, “Norm” is a practical suspension setting for most offroad use. The suspension mode “Hard” is particularly suitable for level surfaces which can be traversed quickly, and also for deep sand.

Ergonomic optimisation of handlebars, hand protectors and seat.
Because of the two clamping elements, which can be rotated through 180 degrees and are mounted asymmetrically as in the HP2 sports model, the high-quality double-butted aluminium tubing handlebars can be mounted in two ergonomically different positions. Whilst the rear handlebar position offers the best ergonomic conditions for riding on roads and on moderate offroad surfaces, the front handlebar position is particularly advantageous for driving in a standing position offroad. The newly developed hand protectors, which are available as special accessories for the R 1200 GS and which are already fitted ex factory as standard for the R 1200 GS Adventure, are now fixed directly to the handlebars. The thickness of the seat foam has been increased in the front area.

Fuel display with new sensor system.
A newly developed sensor system with an expanded measurement range and improved resolution is used for the fuel display. This allows a differentiated fuel level display starting from maximum.

Optimised battery charging with higher generator output.
The AC generator output has been increased from 600 to 720 W and the battery charging has been optimised.

Dynamic design with the emphasis on enduro attributes.
In line with its more dynamic performance, the new R 1200 GS also reflects the enduro aspect visually. Following the extensive model revision of the R 1200 GS, new stainless steel deflectors are used in the front fuel tank area, and the upper part of the front mudguard has also been redesigned to embody the masculine design language that is typical of the enduro. The new appearance of the R 1200 GS is rounded off by the two-coloured optional hand protectors and a newly designed fin for optimised transport of cool air. The newly designed LED rear light and white indicators also reflect the R 1200 GS's dynamic image.

Surfaces and colours.
The new R 1200 GS also shows its increased sportiness through its new colours and the way they are combined. Technical surfaces, as in the silver fin, the magnesium-coloured anodised slide tubes or, following the lead of the sporty HP2, the magnesium-coloured coated cylinder head covers and tyre rims, create a dynamic visual interplay with the traditional painted surfaces of the tank and mudguards.

In combination with Titanium Silver Metallic, a deliberately technical version of the R 1200 GS through the changing colours of the metals.

Dark Slate Metallic Matt, on the other hand, is in the tradition of the particularly sporty BMW models, and gives the new R 1200 GS a very masculine character.

The sporty offroad character of the new R 1200 GS is underscored by the two plain paintwork colours: strong Tanzanite Blue and glowing Namibia Orange.

Special equipment and made-to-measure special accessories.
As a traditional system supplier, BMW Motorrad has also developed a wide range of special equipment for the new R 1200 GS and an extensive selection of made-to-measure special accessories. There is thus plenty of opportunity for personalisation. Special equipment is supplied directly ex factory, and forms an integral part of the manufacturing process in the Berlin plant. Special accessories are fitted by BMW motorcycle dealers.

Special equipment.
- Enduro ESA.
- BMW Motorrad Integral ABS (partly integral, can be switched off).
- RDC.
- ASC.
- Chromium-plated exhaust.
- Heated grips.
- Additional headlights.
- Optimised Navigator holders.
- Hand protectors.
- Case holder.
- Spoked wheels.
- On-board computer with oil level warning.
- Theft alarm with remote control

Special accessories.

Storage space programme.

- Vario case.
- Case holder.**
- Vario topcase.
- Fixing elements for topcase instead of pillion seat.
- Topcase carrier installation kit.
- Inside pocket for Vario case/topcase.
- Waterproof tank rucksack.
- Waterproof tank rucksack, small.
- Softbag Sport, large, 51 l.*
- Softbag Sport, small, 19 l.*
- Luggage roll 53 l, waterproof.*

Design.

- Carbon front mudguard.*
- Carbon splash protection at rear.*
- Cover for Telelever and fork brace.*
- BMW badge for fork brace.*
- LED indicators.*/**

Sound.

- Sport silencer by Akrapović.*

Ergonomics and comfort.

- Wide enduro footrests (Adventure series).
- Adjustable footbrake lever (Adventure series).
- Handlebar cross strut.*
- Padding for handlebar cross strut.*
- Tinted windscreen.*
- Low driver seat (820 mm) black.
- High driver seat, adjustable (880/ 900 mm) black.
- LED light for onboard socket 410 mm.*
- Additional socket.*
- Heated grips.*/**

Navigation and communication.

- BMW Motorrad Navigator.*
- Holder for BMW Motorrad Navigator.
- Function Navigator Bag.*

Safety.

- Hand protection (Adventure series).
- Top spoiler, large, for hand protection.*
- Aluminium valve cover protection (Adventure series).
- Engine protection bar (Adventure series).*
- Cylinder protection, small.*
- Enduro aluminium underbody protection.*
- Extra headlight (from 03/08).*
- Holder for extra headlight.
- Theft alarm with remote control.*/**
- RDC.*

Maintenance and technology.

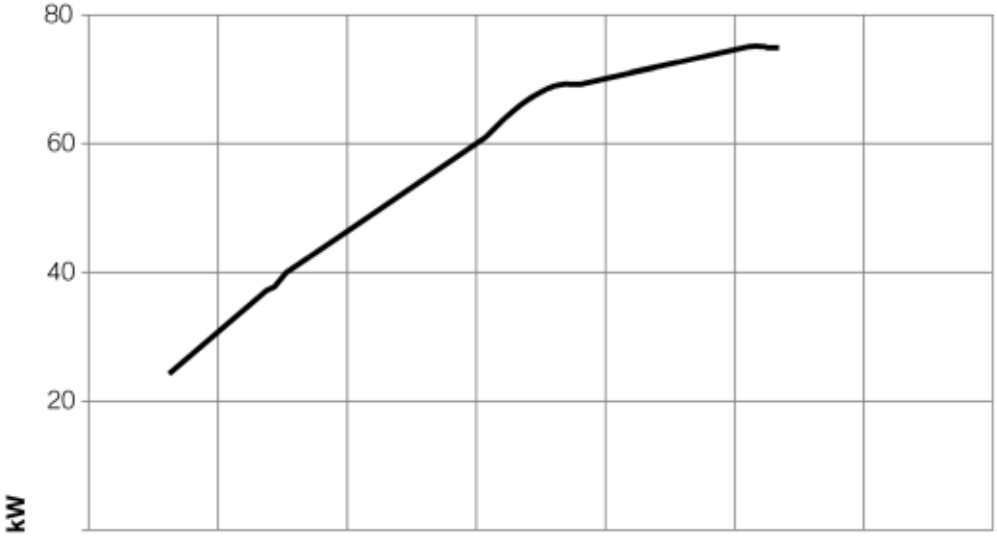
- Paddock stand.*
- Set of on-board service tools.*
- Add-on on-board tools.*
- Safety screw, oil filler nozzle.*
- Emergency kit, cylinder head.*

* As for R 1200 GS.

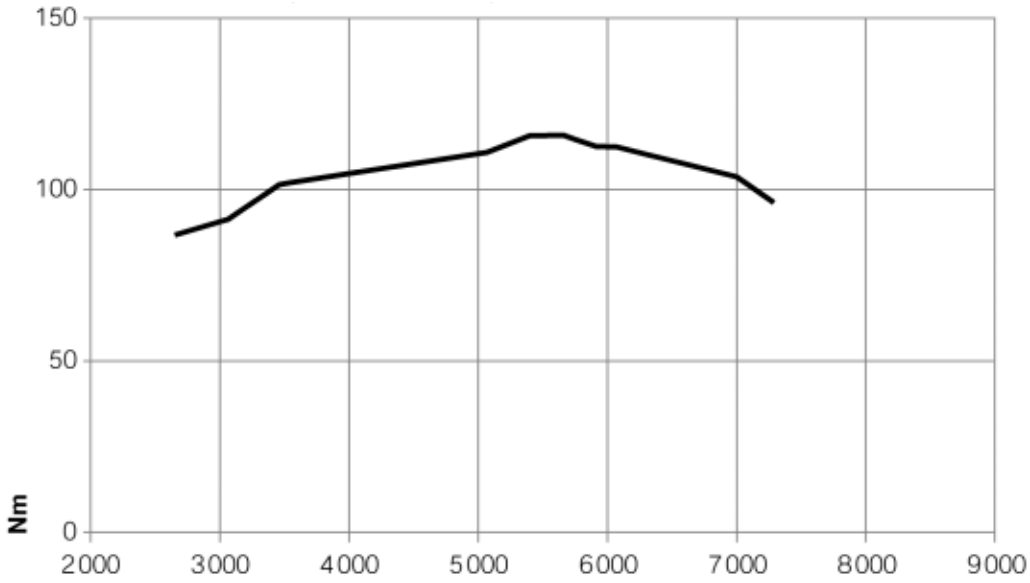
** Also available ex factory as special equipment.

2. Power and torque for the BMW R 1200 GS.

Engine output (to 95/1/CE)



Torque (to 95/1/CE)



Engine Speed (rpm)

3. Technical data for the BMW R 1200 GS.

			BMW R 1200 GS (77 kW)
Engine			
Capacity		cm^3	1170
Bore/lift		mm	101/73
Power		kW/HP	77/105
at engine speed		min^{-1}	7500
Torque		Nm	115
at engine speed		min^{-1}	5 750
Design			Boxer
No. of cylinders			2
Compression/fuel			12,0/S
Valve/gas control			HC (high camshaft)
Valves per cylinder			4
Diameter inlet/outlet		mm	36/31
Throttle valve diameter		mm	47
Mixture preparation			BMS-KP
Exhaust purification			Regulated three-way catalytic converter
Electrical systems			
Generator		W	720
Battery		V/Ah	12/14 maintenance-free
Headlights		W	H7
Starter		kW	1,1
Power transmission/gears			
Clutch			Single-disc dry clutch Ø 180 mm
Gears			dog-coupled six-gear transmission
Primary transmission			1,737
Transmission, gear stages	I		2,375
	II		1,646
	III		1,296
	IV		1,065
	V		0,439
	VI		0,848
Rear wheel drive			Cardan shaft
Transmission ratio			2,91
Frame			
Frame design			Steel tubular frame, carrying engine
Front wheel suspension			BMW Telelever
Rear wheel suspension			BMW Paralever
Spring travel front/rear		mm	190/200
Castor		mm	101
Wheel spacing		mm	1507
Headset angle		°	64,3
Brakes		front	Double-disc brake, Ø 305 mm
		rear	Single-disc brake, Ø 265 mm
			if required: BMW Motorrad Integral ABS (partly integral, can be switched off)
Wheels			Cast wheel, or spoked wheel on request
		front	2.5 x 19
		rear	4.0 x 17
Tyres		front	110/80 R 19
		rear	150/70 R 17
Dimensions and weights			
Total length		mm	2 210
Total width with mirrors		mm	940
Handlebar width without mirrors		mm	930
Seat height		mm	850/870
Empty weight, filled with petrol		kg	229
Perm. total weight		kg	440
Tank capacity		l	20
Travel data			
Fuel consumption	90 km/h	l/100 km	4,3
	120 km/h	l/100 km	5,5
Acceleration	0–100 km/h	s	3,3
Maximum speed		km/h	>200

4. The colours of the BMW R 1200 GS.

Model	Colour	Seat
BMW R 1200 GS	Titanium Silver Metallic	black
	Dark Slate Metallic Matt	black
	Tanzanite Blue	black
	Namibia Orange	black