

High-Mobility Light Vehicle (4x4)

G-Class

Wolf*

The world famous Mercedes-Benz **G-Class** high-mobility light vehicle can be traced back to at least 1972 with a design developed for military applications and the commercial leisure market. From the beginning Mercedes-Benz opted for a close co-operation with Steyr-Daimler-Puch (SDP) of Austria, thus creating the joint company Geländefahrzeug Gesellschaft (GFG), in which each had a 50 per cent share. Component production was shared by Mercedes-Benz for the manufacture of the engine, gearbox, axles, steering and body panels, and SDP being responsible for chassis and transfer box. After completing the wooden mock-up, the first prototype could be presented in 1974. The name agreed to in the end was **G-Wagen** (English G-wagon) with the G standing for Geländewagen or light cross-country vehicle. In German Army service the vehicle would later receive the more convenient designation - **Wolf**. The German Armed Forces (Bundeswehr) first evaluated the G-Wagen in June 1973, though for political reasons the VW Iltis was chosen at its time, only to be replaced by the G-Wagen as the Wolf in the 1990s anyway. Concerning reliability, payload and versatility the German Army had opted for the G-Wagen from the beginning. Meanwhile the first sales were made to the German Border Police (Bundesgrenzschutz) and the Argentine Army, followed by Norway and later Indonesia. In 1982 GFG was dissolved and Daimler-Benz (today Mercedes-Benz) took full ownership of the G-Wagen. During 2002 the G-Wagen was re-branded as the **G-Class**.



Production commenced in 1979 and by 2005 over 60,000 vehicles had been manufactured for military customers incorporating a wide variety of applications and a never ending list of models for civilian and military tasks, respectively. Total production had surpassed 185,000 vehicles in 2005 already.

The front-mounted engine represents a water-cooled Mercedes-Benz unit, either of diesel or petrol type. In the beginning the **460 series**, unveiled on 10 February 1979, was offered with four different engines.

- Model 230 G with four-cylinder petrol unit developing 90 or 102 hp (until 1992)
- Model 240 GD with a four-cylinder diesel unit developing 72 hp (until 1987)
- Model 280 G with a six-cylinder petrol engine developing 155 hp (1981-1992)
- Model 300 GD with five-cylinder diesel unit developing 88 hp (1981)

Continuous upgrades have created a wide variety of types, versions and variants being marketed under the 460, 461 and 463 series. The first model revision of 1981 included a four-speed automatic transmission optional for the Models 280 G and 300 GD. With the introduction of petrol injection the Models 230 G and 280 G became the Models 230 GE and 280 GE in 1982. During 1983 a five-speed manual gearbox was offered as an option for the Models 280 GE and 300 GD while the optional four-speed automatic transmission became available for the Model 230 GE as well. In 1987 the new Model 250 GD powered by five-cylinder diesel engine developing 84 hp and coupled to a five-speed manual gearbox entered the market replacing the earlier Model 240 GD.

* Designation introduced and used by the German Armed Forces (Bundeswehr).

The **461 series** is basically a revised and renamed 460 series offered with two different engines.

- Model 230 GE with four-cylinder petrol engine developing 122 hp (1982-1997)
- Model 290 GD with five-cylinder diesel engine developing 95 hp (1996-1997)

With the incorporation of a turbocharger the Model 290 GD became Model 290 GDT. The five-speed manual gearbox represented a standard component, while a four-speed automatic transmission was offered as an option from 1998 onwards.

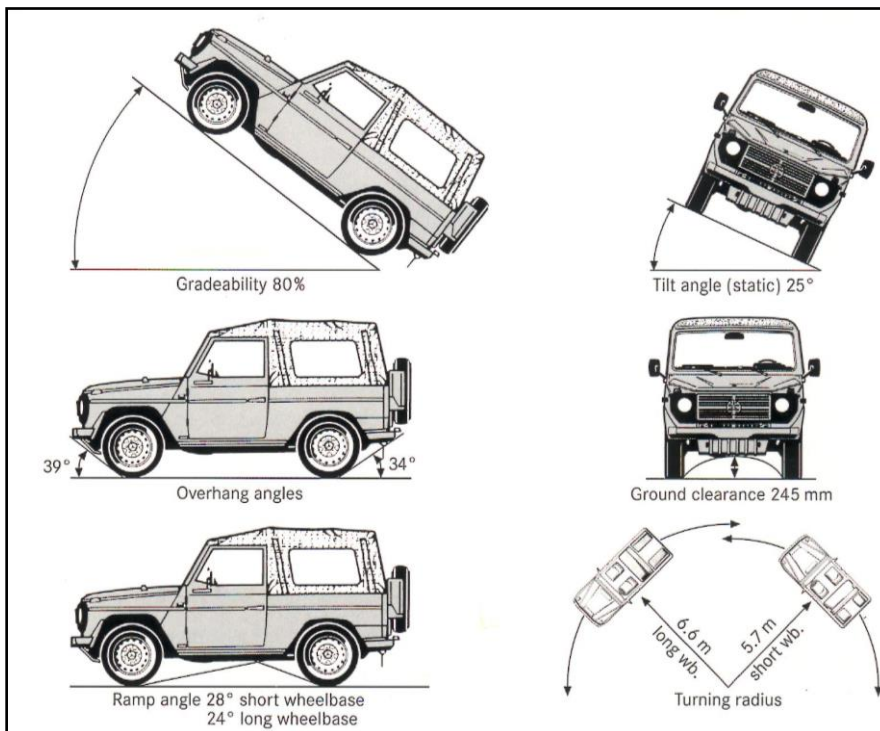
The **462 series** is basically a Completely Knocked Down (CKD) 461 manufactured under licence in Greece from 1991. Announced in 1989 the fully revised **463 series** with AWD and ABS became available from March 1990. Part of the 463 series was the Model 350 GD with automatic transmission and four gears. The Model 350 GD replaced the Model 250 GD. And while the original 460 series was put out of production in 1991, a slightly revised and improved 461 series was launched in 1992. With over 90 per cent going to military services the 461 series represents the classic military light vehicle of the 1990s and now the 21st Century as well.

Production of Models and Series:

460 series: 1979 – 1991 with 2,850 mm / 2,400 mm WB

461 series: 1982 – 1997 with 2,400 mm / 2,850 mm / 3,120 mm WB and 7 factory-offered bodies

463 series: 1990 – 2002 with 2,400 mm / 2,850 mm / 3,400 mm WB



Left:

Technical characteristics of the Mercedes-Benz G-Class:

Gradient / Gradeability until 80 %

Angle of approach 36-39°

Angle of departure 27-34°

Ramp angle 24-28°

Side slope / Tilt angle 25-54°

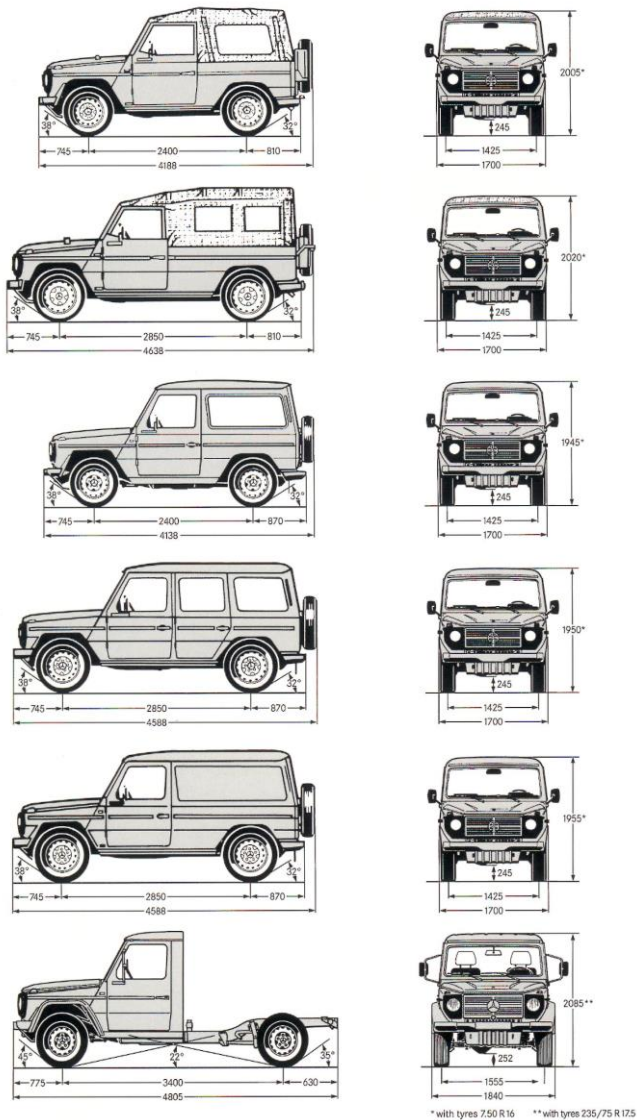
Ground clearance 21-24.5 cm

Turning radius 5.7-6.6 m

Below: Not really shown here, though the fording capability of the G-Class also has its limits.



Above: With full complement the Mercedes-Benz G-class can be abused as a light bus, though with some compromises in comfort.



Mercedes-Benz **G-Class** vehicles have been produced with Short Wheelbase (SWB) of 2,400 mm, Long Wheelbase (LWB) of 2,850 mm, 3,120 mm WB and 3,400 mm (3,428 mm) WB.

The SWB type can transport up to eight soldiers, while the LWB type has a capacity of ten soldiers. Larger WB types are used for special bodies like ambulance, radio, command, control and communication vehicles as well as workshops. At the time of writing WB of 2,850 mm and 3,428 are offered for military applications.

For airborne operations the Mercedes-Benz G-Class vehicles can be easily transported within medium transport helicopters or as sling load below a helicopter. Deployment by parachute from military transport aircraft has been repeatedly proven to be a practical scenario.

Shown on the left from top to bottom are the following variants:

BM 7 with seven seats, payload 700 kg

B10 with ten seats, payload 1,000 kg

BM7 and B10 G-class trucks with soft top have been sold to military services only, while the other variants are also available for the leisure market.

B4 Station Wagon, short, payload 700 kg

B6 Station Wagon, long, payload 1,000 kg

B4 Van and pick-up, payload 1,100 kg

B9 Chassis for shelter bodies such as ambulance. Payload depends on type of body and wheelbase (WB):

3,120 mm WB, payload 1,200 kg

3,400 mm WB, payload 1,600 kg



A Mercedes-Benz G-Class B10 variant towing a 1.5-ton trailer of the German Armed Forces.

The Mercedes-Benz G-Class has been put into service with the following applications:

(a naturally incomplete list)

- Soft top vehicle for general purpose missions (Type 290 GD)
- Soft top vehicle with additional radio equipment (Type 290 GD)
- Soft top vehicle serving as front-line ambulance (Type 290 GD)
- Soft top vehicle with rear platform and tarpaulin (Type 290 GD) – Machine gun carrier - Greece
- Soft top vehicle with rear platform and tarpaulin (Type 290 GD) – Mk.19 AGL carrier - Malaysia
- 106 mm M40 Recoilless Rifle carrier (Type 290 GD) – Greece
- Anti-Tank Missile Carrier with MILAN ATGM (Type 290 GD) – Greece
- Anti-Tank Missile Carrier with TOW ATGM – Greece
- Air Defence Missile Carrier Mistral (France)
- Air-Defence Missile Carrier RBS 70 – Latvia
- Air Defence Missile Carrier Stinger – Germany
- Air Defence Missile Carrier ASRAD ATLAS in quadruple launcher
- Air Defence Missile Carrier ASPIC for VSHORAD Starburst



Communication shelter (ZMS)



Above right: MB G-Class vehicle modified for assault and rescue teams of special police units (Photo: Binz)

- Hard top vehicle with two doors (WB 2,850 mm) – Dutch Army, Norway
- Hard top vehicle as four-door station wagon - Finland
- Hard top vehicle as four-door station wagon, Military Police (MP) – Switzerland
- Shelter carrier ambulance - Abu Dhabi, Dutch Army, Finland, France, Gabon, Germany, Ireland, the Netherlands, Norway, Poland, Slovenia
- Shelter carrier Special-purpose such as maintenance, ambulance, command post (France), EW (France)
- Sensor carrier such as RT-20 radio-theodolite (Finland); communication antennas (France), NTAS-N (Norway), MSP 500 (NASAMS II - Norway)
- Surveillance system carrier such as Margot (France), Lockheed Martin Portable Search and Target Acquisition Radar (PSTAR)
- Robot control vehicle such as DARDS (Dassault Electronique)
- Towing vehicle for special trailers as for motorcycles (France), flexible fuel tanks (France)
- For special purposes the Mercedes-Benz G-Class vehicles can also be fitted with equipment like the Schiebel VAMIDS metal detector.
- Armoured vehicles for police, internal security and military applications.

In German Army Service

After a tense competition between eight different manufacturers offering their models for the small truck class (Kleine Klasse LKW) to replace the LKW 0.5 to gl Iltis, the LKW 0.75 to gl KraKa and the PKW 0.4 to VW 181, Mercedes-Benz was declared winner with the high-mobility light vehicle Mercedes-Benz 250 GD. Named the **Wolf** by the German Army deliveries started in 1989 and are still proceeding at the time of writing with several different variants and the concerning successor models. Until 1994 the German Armed Forces had procured approximately 10,600 Mercedes-Benz Wolf.

The Mercedes-Benz 250 GD is powered by a Mercedes-Benz 5-cylinder, 4-stroke diesel engine type 602 developing 68 kW (92 hp) at 4,600 rpm. Though other engines are optional and have been incorporated in some versions for special military applications.



Left: LKW 0,9 to gl (4x4) MB Typ 250 GD long wheelbase (2850 mm), soft top, with equipment set artillery survey team
Right: LKW 0,9 to gl (4x4) MB Typ 290 GDT Wolf WSA-2, Maintenance vehicle for LeFlaSys AD system Ozelot.



Left: The same vehicle from the rear left side. Note the lifting eyes to deploy the vehicle as a sling load. Ozelot-related vehicles use the more powerful 5-cylinder 4-stroke diesel engine OM 602 DE 29 LA developing 88 kW (119 hp), thus enabling the employment of trailers.

Right: Mercedes-Benz 250 GD Ambulance (type 461.4) with 5-cylinder 4-stroke diesel engine Type OM 602 D29 developing 70 kW (95 hp).



Left: In addition Mercedes-Benz Wolf GD were taken as demonstrator vehicles for the ASRAD Short Range Air Defence (ASRAD) system

Right: VSHORAD Mobile Air Defence launching System (MALDS) as shown in Berlin for the first time in 2004. Missile systems to be fitted to the launcher of the carrier vehicle may also be of Mistral, Igla, Strela, or Stinger type
The German Army procured four different variants:

- Basic variant, open-top, short with 2,400 mm WB (Grundvariante offen kurz)
- Basic variant, open-top, short with 2,400 mm WB, airborne (Grundvariante offen kurz LL)
- Basic variant, open-top, long with 2,850 mm WB (Grundvariante offen lang)
- Basic chassis variant, long with 3,120 mm WB (Grundvariante lang als verlängertes Chassis)

Mercedes-Benz G-Class high-mobility light vehicles have been produced in licence in Austria (Magna Steyr) as the Puch, in France as the Peugeot P4 (with French engine and gearbox), and Greece (Hellenic Vehicle Industry S.A. – ELBO S.A.).

Mercedes-Benz G-class vehicles are in service with the armed forces of:

- Abu Dhabi (UAE),
- Albania,
- Algeria,
- Argentina,
- Austria,
- Bulgaria,
- Canada,
- Cyprus,
- Denmark,
- Finland,
- France (G-class+P4),
- Gabon (P4),
- Germany,
- Greece,
- Guatemala,
- Hungary,
- Indonesia,
- Iran (P4),
- Ireland,
- Jordan,
- Kuwait,
- Latvia,
- Luxembourg,
- Malaysia,
- The Netherlands,
- Niger,
- Norway,
- Oman,
- Poland,
- SHAPE (NATO),
- Singapore,
- Slovakia,
- Slovenia,
- South Africa,
- Spain,
- Sweden,
- Switzerland,
- Taiwan,
- Togo (P4),
- Turkey,
- United Arab Emirates (UAE),
- United Nations (UN),
- United Kingdom (UK),
- US Army Europe,
- USMC,
- Former Yugoslavia (Serbia & Montenegro),
- Zambia,
- Zimbabwe.



The G-Class in disguise: the Peugeot P4 as convoy escort vehicle of the French Army.



Austrian Army G-Class vehicle armed with RBS-56 BILL.

Beside military users the G-Class is also widely in service for rear-echelon roles or second-line duties of various governmental organisations, Non-Governmental Organisation (NGO), aid agencies or the United Nations (UN).



Puch G of the Austrian Army Military Police (MP) - Militärstreife



G-Class with crew-type cab of the Norwegian Army.



G-Class Ambulance as ordered by the Greek Armed Forces (ZMS).



High-Mobility Light Vehicle (4x4)
G-Class 270 CDI
Wolf

Benchmark in its class



Mercedes-Benz



High-Mobility Light Vehicle G-Class 270 CDI (4x4)

2002

High-Mobility Light Vehicle G-Class

Model 270 CDI (4x4)

Vehicle Type	Payload	Wheelbase (mm)	Type	Engine Output EURO IV	Mx. Torque
270 CDI (4x4)	0.7 – 2.0 to	2,850 / 3,428 mm	R5	115 kW / 156 hp	370 Nm

Background

With the beginning of out-of-area deployments the limits of performance for the basic Cold War Wolf became obvious with stronger engines and armour protection emanating as urgent requirements. Recent procurements of the German Armed Forces (Bundeswehr) included special variants such as vehicles with special protection (Spezial-Schutz-Ausstattung - SSA), Mobile Medical Team (MMT) and a ground control station for the LUNA Unmanned Aerial Vehicle (UAV). All of these vehicles are already part of the new Mercedes-Benz 270 CDI series.

While the basic G-Class represented the first post-war All-Wheel-Drive (AWD) vehicle of the light class manufactured by Mercedes-Benz, the Model 270 CDI introduced a modern common rail injection engine into a proven product. The Mercedes-Benz Model 270 CDI is already in service with the armed forces of Canada, Denmark and Germany.

Technical Description

The high-mobility vehicle Mercedes-Benz G 270 CDI is the latest and most advanced member of the to light tactical truck class derived from the G-wagon and is designed for the transport of personnel or loads of up to two tonnes as well as for towing trailers or even artillery pieces. The general-purpose vehicle is equipped with a soft top, though hard top versions (station wagon) or shelter carriers are offered for special military tasks. Various seat arrangements are optional and include up to ten seats for the troop carrier.

Lashing points and mounting rails can be fitted for securing cargo or the fixing of a wide range of special military loads.



The new Mercedes-Benz G-Class vehicles are built with two wheelbases - 2,850 mm and 3,428 mm - and with four different body versions. All wheelbase variants use the same chassis frame, though of slightly different lengths. This ladder-type frame consists of closed box-shaped side members in conjunction with tubular cross-members and is bending-resistant and torsionally stiff. Noise-insulated bodywork is attached by four rubber mountings. All parts of the frame are corrosion protected as well as waxed and sealed.

Mercedes-Benz 270 CDI with front grille protection in form similar to a cow-catcher.



Mercedes-Benz G 270 CDI procession of versions and variants.





Mercedes-Benz G 270 CDI with additional front grille protection, fitted with radio set and large roof stowage arrangement. Such vehicles went to Scandinavia.



The Mercedes-Benz Model 270 CDI has permanent all-wheel drive with 2-ratio transfer case and differential locks on both axles. After entering marginal terrain the differential locks can be engaged while driving. Both axles are located by one transverse and two longitudinal control links. The Mercedes-Benz automatic transmission is of W5 A 580 five-speed type with touchshift, while the electrically-operated transfer case of Mercedes-Benz two-speed type is 100 % lockable.

Left: Trials vehicle Mercedes-Benz 270 CDI with fitted CTIS (PTG).

Powered by a modern turbo-charged common rail diesel engine developing 145 hp the recent Mercedes-Benz G-Class of 270 CDI configuration meets the latest requirements of modern armed forces in terms of fuel efficiency and complies to the last exhaust emission regulations. Other engines offered are:

- Model G 320 with petrol engine developing 215 hp
- Model G 400 CDI with diesel engine developing 250 hp
- Model G 500 with petrol engine developing 296 hp

In addition a higher rated Model G55AMG is offered with a petrol engine developing 476 hp. However, at the time of writing only the 270 CDI is available for military applications.

Suspension is by coils springs and telescopic shock absorbers, with both axles fitted via a single transverse and two longitudinal control links. Dual circuit disk brakes with incorporated vacuum booster are standard. Rear drums are available as an option for heavier vehicles. ABS is standard as well.

The 12 V / 24 V electrical system has been designed to cope with higher military demands because most vehicles need additional electrical power for radios, data processing devices, winches, trailers or slave starting devices.

High-Mobility Light Vehicle G-Class Model 270 CDI (4x4)

Model	Ausführung	High-Mobility Light Vehicle
Type	Typ	MB G 270 CDI 2,850 mm WB, soft top
Manufacturer	Hersteller	Mercedes-Benz / DaimlerChrysler AG, Department VL/FR – HPC 160 D-76742 Woerth, Germany
Introduction into service	Einführung	2002
Cab seating	Sitzplätze Fahrerhaus	2
Seats (rear)	Sitzplätze (hinten)	up to 6
Configuration	Antriebsformel	4 x 4
Weight	Gewicht	
Weight empty chassis	Militärisches Leergewicht	2,270 kg
Weight loaded, road (GVW)	zulässiges Gesamtgewicht	3,490 kg
Weight on front axle (loaded)	Belastung der Vorderachse mit Ladung	2,200 kg
Weight on rear axle (loaded)	Belastung der Hinterachse mit Ladung	2,800 kg
Payload	Nutzlast	500 - 790 kg
Max. load (road)	außergewöhnliche Belastung (Straße)	2,000 kg
Max. load (cross-country)	außergewöhnliche Belastung (Gelände)	n/a
Towed load (road)	zulässige Anhängelast (Straße)	2,850-3,300 kg (braked); 750 kg (unbraked)
Towed load (cross-country)	zulässige Anhängelast (Gelände)	n/a
Load area	Ladefläche	n/a
Length (wheelbase 2,850 mm)	Länge (Radstand 2,850 mm)	458.8 cm
Width	Breite	170 cm
Height (overall)	Höhe Fahrerhaus	195 cm
Ground clearance	Bodenfreiheit	22 cm
Track (front)	Spurweite (vorne)	147.5 cm
Track (rear)	Spurweite (hinten)	155.5 cm
Wheelbase	Radstand	2,850 or 3,428 mm
Angle of approach	Böschungswinkel vorne	39°
Angle of departure	Böschungswinkel hinten	34°
Chassis frame	Rahmen	Ladder-type frame, bending-resistant, torsionally stiff
Max speed (road)	Höchstgeschwindigkeit	120 km/h (limited), 160 km/h (unrestricted)
Acceleration 0-100 km/h (s)	Beschleunigung 0-100 km/h (s)	13.2 – 13.7
Range	Fahrbereich (Straße)	750 km
Fuel capacity	Kraftstoff-Vorrat	96 ltr. (25.3 gal) Diesel or JP 8
Fuel consumption	Kraftstoff-Verbrauch	10.9 ltr./100km
Gradient	Steigfähigkeit	80 %
Side slope	Querneigung, Kippgrenze	87 %
Fording (standard)	Wadfähigkeit (ohne Watsatz)	60 cm
Fording (with kit)	Wadfähigkeit (mit Watsatz)	80 cm
Engine	Motor	
Designation	Bezeichnung	OM 612 DE 27 LA
Bore x Stroke	Bohrung x Hub (mm)	88 x 88.3
Displacement	Hubraum (ccm)	2,685 ccm
Output	Leistung KW (PS)/min ⁻¹	115(156) at 3,800 rpm
Torque, max.	Drehmoment (Nm / kpm)	370 Nm (273 ft-lbs) at 1,600-2,600 rpm
CO ₂ -Emission (g/km)	CO ₂ -Ausstoß (g/km)	289
Cooling	Kühlung	water-cooled
Power transfer	Kraftübertragung	Permanent all-wheel drive; VG 150E-3W 2-speed full time (4x4) with lockable differential
Transmission	Getriebe	W5A 580 5-speed automatic with touchshift
Transfer case	Antriebsübersetzung	Mercedes-Benz two-speed transfer case 100 % lockable, electrically operated
Steering	Lenkung	LS 2 B power-assisted
Turning circle	Wendekreis	6.5 m
Axles	Achsen	Driven Mercedes-Benz rigid axles with coil springs and hydraulic shock absorbers. Front and rear axle are equipped with differential locks 100 % lockable, electrically operated
Suspension (front)	Radaufhängung (vorne)	Coil springs with telescopic shock absorbers
Suspension (rear)	Radaufhängung (hinten)	Coil springs with telescopic shock absorbers

Tyres	Bereifung	20.5 R 16 (standard); other sizes optional (265/70 R 16)
Brake (main)	Betriebsbremse	Dual circuit, hydraulic with vacuum booster, discs front, discs or drums rear, ABS (standard)
Brake (parking)	Feststellbremse / Handbremse	mechanical, takes effect on rear wheels
Brake (engine)	Motorbremse	Actuated pneumatically by lever at the steering column, 2-stage, with exhaust flap and constant throttle.
Electrical system	Fahrzeugelektrik	12/24 V
Alternators	Wandler	2 (12 V 150 A and 28 V 80 A)
Batteries	Batterien	3 x 12 V, each 60 Ah (70 Ah optional)
Trailer socket type	Anhängeranschluß	n/a
Trailer couplings (optional)	Anhängerkupplung	yes
Armour	Panzerung	optional

The Mercedes-Benz G-Class 270 CDI is in service with the armed forces of Canada, Denmark and Germany. During 2003 Denmark received an initial batch of 30 vehicles delivered under a five-year programme, allowing the procurement of up to 1,000 vehicles to be ordered in batches between 2003 and 2009.

In October 2003 Mercedes-Benz was awarded a contract for 802 special variants of the Model 270 CDI for the Canadian Army as part of the Standard Military Pattern (SMP) segment of the Light Utility Vehicle Wheeled (LUVW) programme for use by deployable field force units. Like in Germany the VW Iltis was being replaced by a G-Class vehicle of Mercedes-Benz.

After 25 years of production 8,800 units of the G-Class were sold in 2002, followed by 7,200 for the following year.

Special Vehicles based on Mercedes-Benz G-Class

Protected G-Class vehicles are offered with factory-approved kits since around 1992. The increasing demand for protection culminated with the peace-keeping operations of the 1990s and most often concerned second-line vehicles at first considered to be operating only in low-threat environments. In modern wars there is no second-line, rear-echelons are threatened by mines, IED (Improvised Explosive Devices) and snipers as well as the front-line units in the past. The G-Class can be easily adapted to the new scenarios with its low-profile armoured versions already in service worldwide. Protected G-Class vehicles can be used for military, law-enforcement, aid and civil agencies. Supplied directly from the factory all-round ballistic and detonation protection can be integrated by fitting ballistic protection panels directly into the bodyshell, thus giving protection where add-on applique armour kits could expose some deficiencies. Protection levels available include B4, B6 and B7.

Steyr-Daimler-Puch armoured vehicles

In 1995 the Austrian company Steyr-Daimler-Puch offered a new Armoured Personnel Carrier (APC). Known as the Puch A (4x4) the vehicle features a new 6-cylinder direct injection, turbocharged and intercooled engine giving a top speed of 140 km/h on roads.

Other companies in Austria offering armoured protection for Puch G vehicles are Sicherheits-Transport-Service Austria (STS) with the **Puma** and Armoured Car Systems Achleitner with the **Survivor**.

Armoured Peugeot P4 (4x4) 750 kg light vehicle with protected cab

Panhard et Levasor produces an armoured protection kit proof against 7.62 mm ball rounds at 100 metres for the G-Class of vehicles and has been fitted to the Peugeot P4. In service with the French Army.



Polish Special Forces Vehicle **JEZ**

The Polish Grupa Zasada builds Mercedes-Benz G-Class vehicles in licence and the Polish Army conducted the Cobra Programme which saw the procurement of Mercedes-Benz 290 GD vehicles in various versions such as pick-up, ambulance or for special military police applications. A special forces variant was designated JEZ which can be armed with a variety of weapons like 12.7 mm NSW machine gun, a LM 60 D 60 mm mortar, the PKK Fagot ATGM or the Strzala 2M VSHORAD system.



CSIR Defencetek **G-Bat Mk 2**

South Africa's Mechem company had developed an air-portable rapid reaction vehicle based on the Mercedes-Benz G-Class: the G-Bat. A prototype was built in 1998. Later this vehicle was marketed by CSIR Defencetek and evolved into the very similar G-BAT Mk 2.



Photographs: CSIR Defencetek

Also the **WASP** Rapid Deployment Reconnaissance Vehicle (RDRV) chosen for service in the armed forces of the Republic of South Africa incorporates several Mercedes-Benz/DaimlerChrysler components such as transmission, transfer box and axles.

Escort vehicle with special forces-like weapons arrangement – In service with Denmark

Rheinmetall – Interim Fast Attack Vehicle (**IFAV**)

The USMC has procured an unknown number of Mercedes-Benz G-Class based Interim Fast Attack Vehicles (IFAV) armed with .50 caliber machine gun, a Mk.19 AGL as well as a 7.62 mm (.30) M240 machine gun. As of 2000 62 vehicles had been delivered.

Rheinmetall Light Infantry Vehicle (**LIV**):

Wolf ESK

This ten-seat modular vehicle is based on common chassis with a frame-mounted quick-change system for a variety of mission-specific modules. Four vehicles were evaluated by the German Army according an Urgent Operational Requirement (UOR) for service in Afghanistan. Referred to as the Wolf ESK (Wolf Einsatzfahrzeug Spezialisierte Kräfte) by the German Army this vehicle is based on Model 270 CDI with 3,290 mm WB. GVW is 5,200 kg. The open-topped vehicle uses a body package made by Binz GmbH giving protection against 7.62 mm rounds. A similar protected hard-top variant remains optional. Run-flat tyres are standard. (Length: 512 cm; Width: 184 cm; Height: 187 cm. Empty weight: 2,250 kg; max. Payload: 2,650 kg).



LIV



LIV(SO)

Rheinmetall Light Infantry Vehicle (Special Operations) **LIV(SO)**:

Serval

The German Armed Forces have procured 21 LIV(SO) for the German Special Forces (KSK – Kommando Spezialkräfte). Deliveries were conducted between January and June 2004. The LIV (SO) is equipped with the new 2.7-litre CDI engine developing 115 kW (156 hp). Armament consists of one 12.7 mm machine gun or a 40 mm automatic grenade launcher with at least one additional 7.62 mm machine gun MG3. The LIV(SO) can be transported within a CH-53 G transport helicopter, smoke dischargers and run-flat tyres are standard. In German Army service the vehicle has received the designation Aufklärungs- und Gefechtsfahrzeug (AGF) Serval.

Panhard Special Patrol Vehicle (**SPV**):

In mid September 2005 Panhard General Defense had received an order for 40 Special Patrol Vehicles (SPV) for the French Army's Special Operations Command. Deliveries started in the first quarter of 2006.



Two 20-litre jerrycans extend the standard range of 800 km considerably.

Based on the Mercedes-Benz G 270 CDI with 2,850 mm wheelbase the vehicle is intended for rapid-intervention, early-entry and special-operations missions where a high level of autonomy and mobility is required. With a combat weight of 4,000 kg the SPV can carry a payload in excess of 1,100 kg. A crew of three is advised, though seating for an additional crew member in the rear compartment is standard. Armed with a ring-mounted 12.7 mm HMG and a 7.62 mm MG installed in a swing-mount the vehicle incorporates a large array of special features such as a composite armour floor, and connections for a tyre inflation system for the air compressor, as well as a front-mounted 4,000 kg capacity winch. For practical reasons only the G-Class standard air conditioning system has been removed. Internal space available for stowage is 3.5 m³. The SPV is air transportable and lifting eyes enable airborne insertions as sling-load.

G-Class

Agile and versatile – a battle-proven Workhorse

Ordered and ordered again

In 1997 a new generation of Mercedes-Benz cross-country vehicles entered the market: the **M-Class**. Not imagined since the introduction of the G-Class the new class, manufactured in Tuscaloosa in Alabama, incorporates the comfort similar to the C-, E- or S-Classes of Mercedes-Benz limousines. The ML320 for example is powered by a 6-cylinder engine developing 218 hp, the conventional differential has been replaced by a electronically-controlled traction system. Since 1999 the Tuning Society Brabus integrates the powerful 7.3-litre V12 engine into the M-Class. However, for the military customer, such luxury vehicles can not be procured in reasonable numbers and outperform tactical requirements in unrelated areas. With the M-Class Mercedes-Benz has left the traditional military market for high-mobility cross-country vehicles and returned to the requirements of the leisure market coincidentally including cross-country capabilities as well. Thus the M-Class can not be considered as a follow-on design of the G-Class.

