The PUMA

Protection | Survivability | Effectiveness

PUMA – the ultimate Armoured Infantry Fighting Vehicle

The new and very actual challenges of the global political situation have considerable impacts on future military conflicts, which in turn significantly influence the equipment of the armed forces. While weapon systems have so far been designed for durability and effectiveness in confrontations with equal opponents, future-oriented weapon systems must meet more extensive military requirements and demand new technical solutions. The decision in favour of the new armoured infantry fighting vehicle of the German Army has opened up a new chapter in the history of army technology. With the PUMA, the German Army will receive a top product of the German defence industry being optimal suited for all types of missions on all theatres of operation.

The concept of the PUMA

The PUMA combines the contrary requirements for high strategic and tactical mobility on the one hand and maximum protection and maximum fire power on the other in an optimum manner in one single high-performance weapon system, capable to react adequate and flexible at any time, at any location and at any level of intensity.

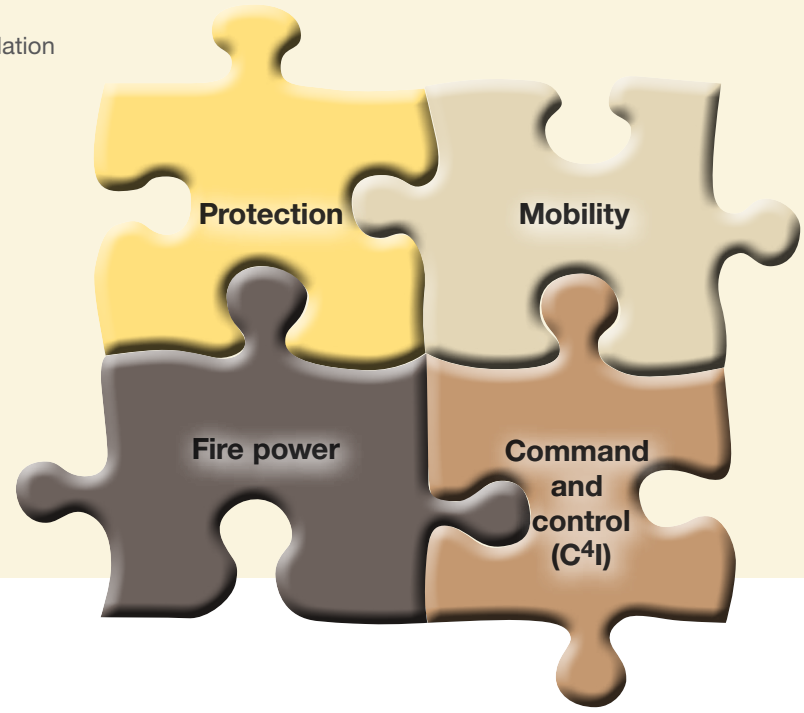
Therefore the PUMA offers with its innovative and forward-looking solutions

- optimum **Protection** against any type of threat for maximum **Survivability** of the entire crew
- optimum armament for escalation and de-escalation in all types of missions for an excellent combat **Effectiveness**
- rapid, strategic, global deployability and high tactical mobility
- network centric warfare capability
- sustainability under worldwide climatic conditions
- built in test equipment
- integrated training system and equipment

Performance capabilities

Maximum survivability of the crew
- under a large variety of different symmetric and asymmetric threats
- in conflicts of all intensity levels
- with the option for adequate escalation and de-escalation
- in rapid, global deployments
- within international operations
- under multinational command

require maximum technical performance capabilities in terms of



Protection
The PUMA incorporates what is currently the world's best combined protection against mines, IEDs, shaped charges and KE ammunition as well as NBC weapons. In addition an active softkill system against guided missiles will be integrated. State-of-the-art optical and optronic vision equipment allows early reconnaissance and quick reaction to threat situations.

Fire power
Its stabilised 30 mm automatic cannon enables the PUMA to engage targets on the move with high precision and effectiveness. Its ammunition with time fuse technology enables the crew to fight against a variety of different threats. Due to the Hunter-Killer functionality, similar to a main battle tank, it is possible to engage several different targets within an extremely short period of time.

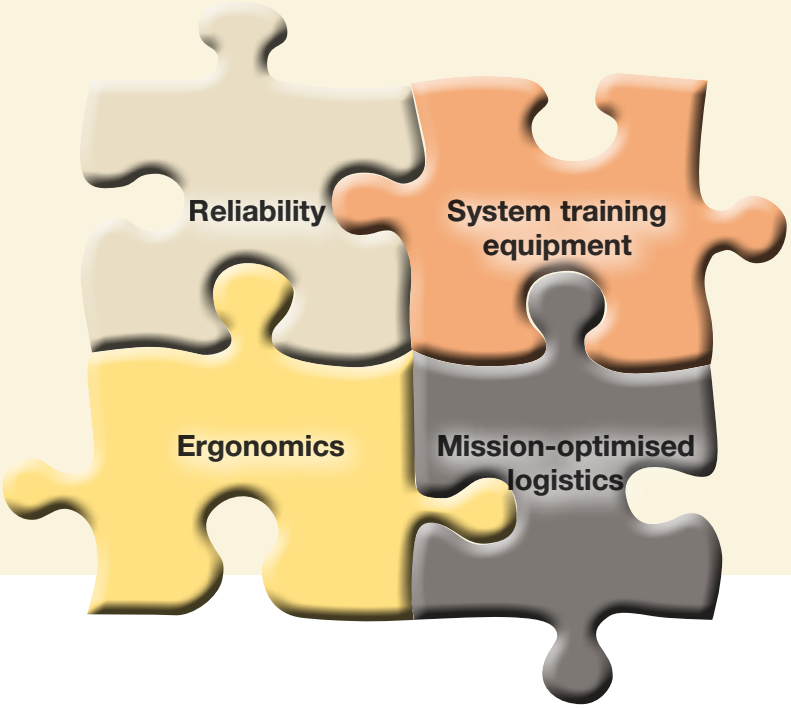
Mobility
The PUMA is air-transportable by the A400M aircraft and ready for deployment within a short time after landing. Its specific power-to-weight ratio (up to 25 kW/t), combined with the decoupled hydropneumatic running gear provides the vehicle with unique, operational mobility comparable to a modern main battle tank.

Command and control (C^4I)
Standardised interfaces support the integration of all command and information systems into the PUMA as well as its deployment in combined arms operations. The integrated communications concept along with the revolutionary design of a contiguous crew compartment ensures optimum information and highest situational awareness of the entire crew.

Deployability

Global missions over long distances
- under worldwide conditions
- with long mission times
- with inadequate infrastructure

place high demands on mission capability and require



Reliability
The PUMA is developed and built to acknowledged German and international standards. Consistent high quality and maximum reliability are guaranteed. Component design redundancy and degraded modes ensure a high level of operational readiness.

System training equipment
With the system integrated training equipment the PUMA crew can be trained on the weapon system at any time and any location, practise with the weapon system and simulate missions. A wide range of training aids are to ensure high level skills.

Ergonomics
Numerous technical features of the PUMA, such as simple operation, decoupled running gear, air-conditioned interior and an innovative seating concept afford the crew a high level of endurance in sustained operations.

Mission-optimised logistics
The integrated built in test equipment allows the crew to identify faults and to initiate quick remedial action. This ensures maximum operational availability. Mission Support Kits and also Through Life Support are to be provided by PUMA industry.

Innovation

Shorter technological innovation cycles
- without reducing the in-service life and
- changing operational doctrines

require innovative approaches in terms of

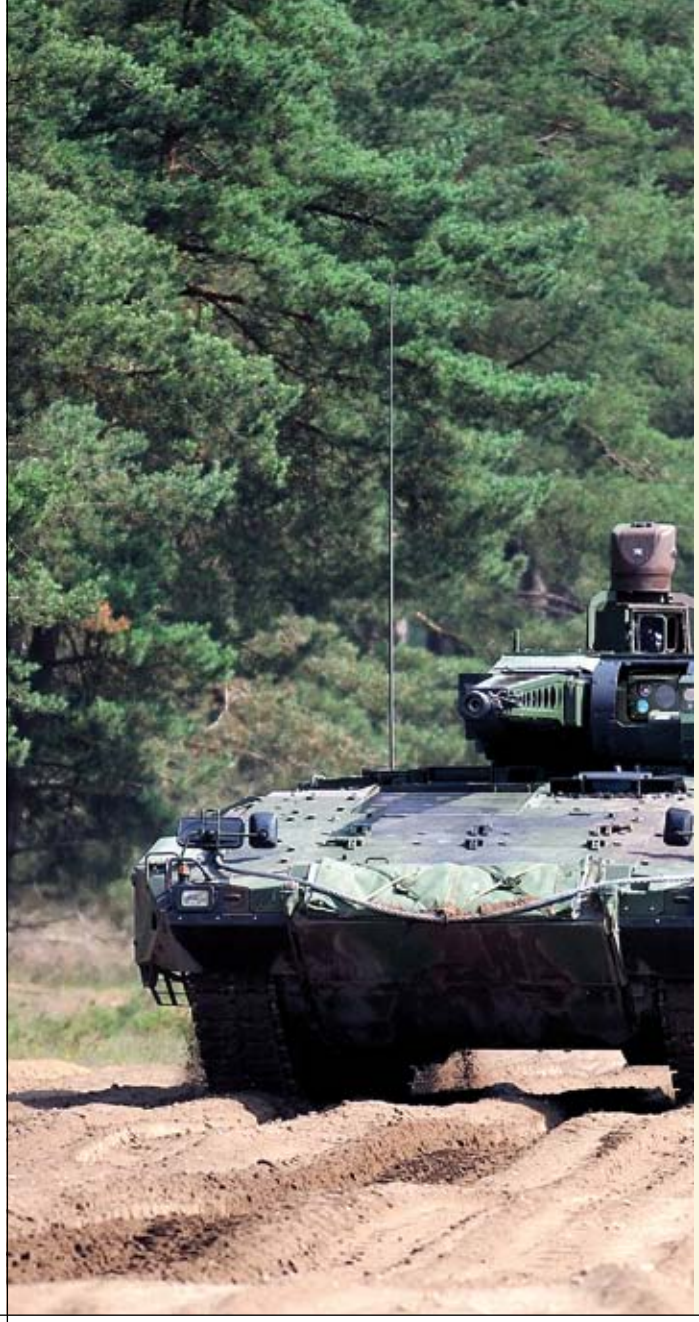
Modularity
The PUMA is modularised which ensures flexible adaptation of the system to a variety of different missions as well as an appropriate reaction to all threat scenarios.

Flexibility
Modularity and use of standardised interfaces (e.g. CAN-bus) enable an integration of various kinds of government furnished equipment. So the adaptation to new requirements is easily possible.

Viability for the future
Modularity and flexibility were basic elements of the development for PUMA. So the integration of the latest generation of equipment for communication and battlefield management is a matter of course. Because of using state-of-the-art technologies, the PUMA is optimally prepared to meet the challenges of the 21st century.

Growth potential
The contiguous crew compartment and wide range of the vehicle weight from 31.5 to 43 tons offer great flexibility regarding future technologies and alternative or additional equipment. This new concept makes the PUMA an ideal platform for a large number of further combat vehicles.

Performance Data	
Weight, level A (Air-transportable by A400M):	31.45 t
Gross vehicle weight (GVW):	43.0 t
Length – width – height:	7.6 m – 3.9 m – 3.6 m
Ground clearance	0.45 m
Step climb / Gap crossing	0.8 m / 2.5 m
Fording depth	1.2 m without preparation
Engine power:	800 kW
Specific power-to-weight ratio:	up to 25 kW / t
Maximum speed (road), forward / reverse:	70 km / h / 30 km / h
Crew:	9 (6+3)
Chassis:	decoupled running gear
Turret:	unmanned, remote-controlled
Main armament:	MK30-2 / ABM, cal. 30 mm
Secondary armament:	MG 4, cal. 5.56 mm
Guided missile system:	SPIKE LR (EuroSpike)
Main armament rounds	200 (capacity ready bin) + 200 (stowed rounds)
Secondary armament rounds	1000 (capacity ready bin) + 1000 (stowed rounds)



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