

# THALES



## BUSHMASTER FAMILY OF VEHICLES



“ The Thales Group is a world leader in mission critical systems and solutions for aerospace, defence and security markets. ”

“ Australia’s foremost military and specialist vehicle designer and manufacturer ”



**THALES**



Thales operates in 50 countries, employing more than 68,000 people and generating annual revenues of over AUD19 billion.

Technology is a key driver of competitive performance. With 20% of revenues allocated into research and development, Thales keeps its customers at the cutting edge.

Today, Thales is the world leader in integrated transport systems, a European market leader in satellite systems and space exploration, a major avionics partner to the world’s leading aircraft manufacturers and a key strategic partner for major defence operations around the world.

Thales Australia’s capabilities span a wide spectrum of high technology products and services. These include command and control systems, communications and mission management systems, electronic warfare, training simulators, avionics, air traffic management, munitions and protected mobility vehicles.

**PROTECTED MOBILITY OVERVIEW**

Thales’s Land & Joint Systems Division has significant expertise in military and specialist vehicles, including combat proven wheeled armoured vehicles, land mine protection technology, high mobility engineering vehicles and all terrain fire fighting vehicles.

The Protected Mobility Systems group designs, develops and manufactures specialist defence and commercial equipment including purpose specific military vehicles, gun systems, marine equipment and integrated logistic support.

Thales Australia has a world-class design and development team, and its Protected Mobility Systems facility in Bendigo, Australia, positions the company as Australia’s foremost military and specialist vehicle designer and manufacturer.



Bushmaster

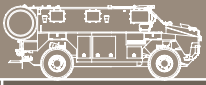


Bushmaster - Single Cab



FireKing





## PROTECTED MOBILITY

### FAMILY OF VEHICLES

The Thales Bushmaster is a highly mobile, ballistics, mine and improvised explosive device (IED) blast resistant Protected Mobility Vehicle (PMV). Bushmaster has an established family of modular armoured vehicles offering high levels of protected mobility for combat, combat support and combat service support troops across a diverse range of mission profiles including troop movement, command and control, engineer support and ambulance variants.

With over 400 units delivered to the Australian Defence Force and the Netherlands, Bushmaster is operationally combat-proven, highly capable and affordable, offering greatly enhanced protection, mobility, mission performance, reliability, mission flexibility and operational sustainability.

### PROOF OF PERFORMANCE

Bushmaster can carry up to 10 soldiers (including driver) and operate independently in remote environments.

Operational deployment with Australian forces in Iraq and Afghanistan, and Dutch forces in Afghanistan, has successfully demonstrated the vehicle's capabilities.

Bushmaster has protected and saved lives during numerous incidents including offensive operations, ambushes and roadside bombings involving IED, FSP and RPG attack and comes with a range of field upgradeable protection packages depending on the threat environment.

### PROTECTION AND SURVIVABILITY

Bushmaster provides a unique level of protection and survivability through its mobility, monocoque vee-shaped armoured hull, and passive and active protection measures.

- Range of ballistic protection against multiple hits from ballistic projectiles and shell fragments to the occupant and engine power pack compartments\*
- Significant mine blast protection anywhere under vehicle including wheel stations\*
- Protection against Fragment Shaped Projectiles (FSP) and side blasts from improvised explosive devices\*
- Space to mount NBC system
- Space to mount and operate Remote Weapon Station.

Field upgradability and retrofit ability are key design requirements of protection system kits.

\*Detailed levels of ballistic and mine blast protection available upon request.





## SUPPORTABILITY

Thales offers a range of program support, tailored to meet the exact requirement of the customer and includes administration of logistic support contracts, management of logistic support arrangements, and provision of user and technical documentation for its entire fleet. As required this may also include embedding Field Service Representatives into forward placed units, based on a high level of major commercial off the shelf components.

In theatre operational logistic support is provided via an extensive global network of service centres and field service representative. This support includes the supply of maintenance parts and provision of on-site support, including 24/7 technical advice and engineering support.

## MOBILITY

Bushmaster is unique with its four coil independent suspension system that can move quickly over long distances by road and manoeuvre at speed across country. It has a high power to weight ratio; sustained highway speed of over 100 kmph full-time four wheel drive; selectable differential locks front, centre and rear; high ground clearance and wheel size combined with a push-button controlled central tire inflation system; critical angles for off-road mobility; and optional run-flat tire inserts to ensure mobility, even with damaged tyres.

## FLEXIBILITY

The Bushmaster's large internal volume within its monocoque body has open architecture that can be easily adapted to meet multi-role requirements even in the field. Externally Bushmaster's FOV have been designed with a modular approach allowing reconfiguration, and simplicity of repair with high levels of interchangeability between variants.





## MISSION SUITABILITY - VARIANTS

Over 700 units have been ordered by the Australian Army in six variants:

- Patrol Vehicle (Troop Carrier)
- Command Vehicle
- Assault Pioneer Vehicle
- Ambulance
- Direct Fire Support Weapons Vehicle
- Mortar Variant.

Additional derivatives are available:

- Bushmaster – Single Cab – a cab chassis 4 x 4 logistic vehicle variant
- FireKing – a purpose-built fire fighting vehicle. It offers the world's only crew survival module in the event of the vehicle being engulfed in flames, plus unrivalled protection and mobility compared to commercial fire fighting vehicles.

## RELIABILITY AND MAINTAINABILITY

The Bushmaster is a low risk solution backed by 250,000 km (156,000 miles) of testing and based on Military off the Shelf (MOTS) vehicles. As a complete integrated system, it meets US Department of Defense Technology Readiness Level 8.

Extensive testing and operational experience has confirmed the vehicle can operate in terrain ranging from tropical areas to sandy deserts, mountainous jungles and alpine conditions including snow.

## COST OF OWNERSHIP

Bushmaster's unique long-life monocoque armoured hull, combined with globally available and sustainable Commercial Off The Shelf (COTS) driveline components, result in high reliability and availability; low operating cost per mile; rapid maintenance including replacement of engine, transmission and other driveline components in the field; low lifecycle costs and through life cost of ownership.



## CREDENTIALS - CONTRACTS WON

Thales's successful major specialist vehicle contracts include:

- Bushmaster - Protected Mobility Vehicles – Australian Army and Air Force under Project BUSHRANGER
- Bushmaster – Armoured Patrol Vehicles – Royal Netherlands Army
- Light Engineering Tractor (LET) – Australian Defence Force
- High Mobility Engineering Excavator (HMEE) – U.S. Army
- High Mobility Engineering Vehicle (HMEV) – PLA China
- FireKing – ForestrySA
- Integrated Logistic Support and Through Life Support contracts for specialist vehicles manufactured.

**Thales Australia** - Land & Joint Systems Division  
Protected Mobility  
Finn Street, Bendigo  
Victoria 3552, Australia  
Tel: +61 (0)3 5440 4311  
Fax: +61 (0)3 5441 6764  
Web: [www.thalesgroup.com.au](http://www.thalesgroup.com.au)  
Thales Australia Limited ABN 66 008 642 751



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