MILITARY EQUIPMENT BROCHURE



BUCKLER

LAND SYSTEMS

SCAN ME

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ABOUT US

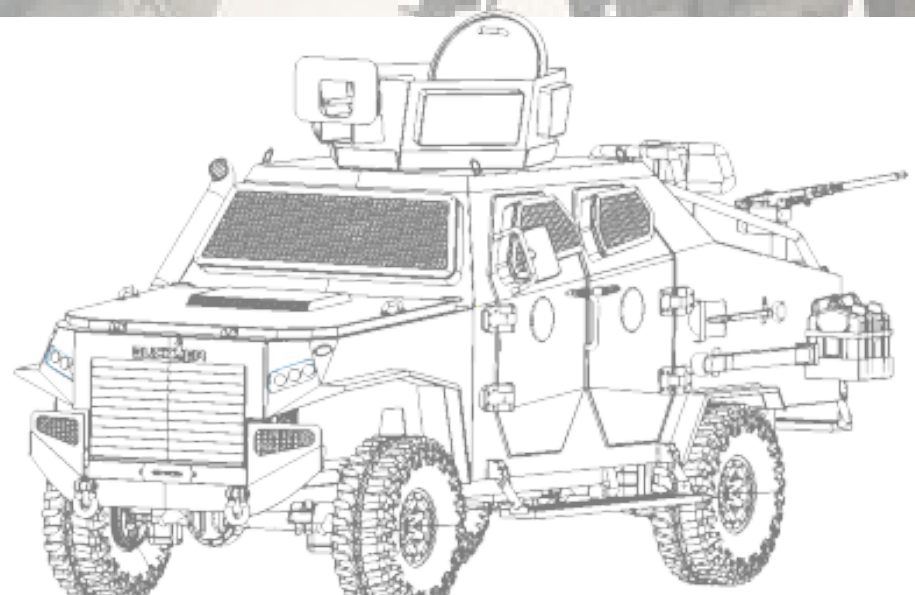
Buckler Land Systems is a defence solutions provider with specialization in the design and manufacturing of a wide variety of Military, Civilian and Commercial Armoured Vehicles.

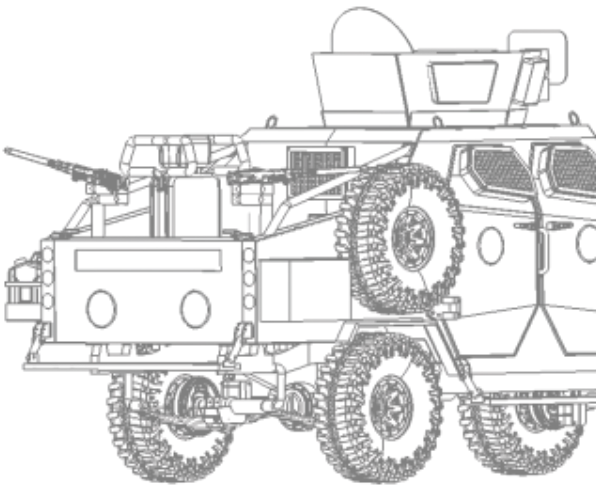
We have also established an operational branch office in the United Kingdom for the coordination of our supply chain and technical partnerships.

We are a member of the Defence Industries Association of Nigeria (DIAN) and a member of the Association of Security Consultants UK. Buckler Systems has a Joint Venture working relationship with the Defence Industries Corporation of Nigeria (DICON) to facilitate the joint production of Armoured Vehicles, Body Armour and other security equipment for the Nigerian Armed Forces.

We have a combined technical experience of over 3 decades in the design, prototyping and manufacturing of civilian and military armoured vehicles. Some of our areas of expertise include the following:

- Design, Prototyping and Manufacturing of Armoured Personnel Carriers and other security vehicles for the Police and Military.
- Design, Prototyping and Manufacturing of various Air Systems e.g Drones etc.
- Ballistic Helmets and Vests for Civilian, Police and Military applications
- Armoured Security Check post/Cabins
- Armouring of Civilian Vehicles; Armoured SUVs such as the Armoured Toyota Landcruiser, Armoured Mercedes Benz G-Wagon, etc. and Armoured Sedan like the Armoured Mercedes Benz S600 & Maybach etc.
- Design, Development and Manufacturing of Commercial Armoured Vehicles; Cash-In-Transit vehicles, Bullion Trucks for the movement of cash and valuables, Mobile Banks, and ATMs etc.
- Repair, Refurbishment and Upgrade of Armoured Vehicles







MESSAGE FROM THE CEO

At Buckler Land Systems, our mission is straightforward: to protect lives without compromise.

In an unpredictable world, we design and deliver Military Armoured Vehicles and equipment that provide trusted ballistic protection, advanced mobility, and discreet confidence to those who need it most.

Every product or equipment manufactured by Buckler, is meticulously crafted with precision engineering, using certified materials. Through-life support is tailored to your environment and mission, ensuring your safety. Whether for defence, internal security or peacekeeping operations, our commitment to quality, integrity, and your safety guarantees your security.

Buckler Land Systems is fully authorised and certified by the Ministry of Defence, The Defence Industries Corporation of Nigeria and other relevant government agencies of the Federal Republic of Nigeria to operate as an armoured vehicle manufacturer. The knowledge of our certification and accreditation instills confidence and peace of mind in our esteemed clients, knowing that they are entrusting us with a sensitive and personal task: providing them with a vehicle that will protect lives.

Thank you for considering Buckler Land Systems. We look forward to earning your trust.



OLATUNJI A. OMOTORIOGUN

CHIEF EXECUTIVE OFFICER

OUR TEAM

We have been involved in several unique designs and manufacturing of Civilian Armoured Vehicles, Military vehicles, and Cash-In-Transit vehicles. Over several years of technology and skills transfer by our expat staff to our skilled Nigerian technical team, our team now comprises of experts who are mostly Nigerian citizens and a few expatriates.

Buckler, brings over 30 years of combined experience in armouring and security vehicle production.

➢ CHIEF EXECUTIVE OFFICER - PROFILE

Buckler Land Systems Limited is led by Olatunji ***Ayobami*** Omotoriogun. Ayobami, is a seasoned Military Vehicle Engineer, Counterterrorism specialist and Business leader. He has a wealth of experience in armoured vehicle design, prototyping, testing and production. He is a Chevening Alumnus and graduate of Military Vehicle Technology and Counterterrorism from the prestigious Cranfield University/Defence Academy of the United Kingdom.

HIGHLIGHTS OF EXPERTISE

- Armoured Vehicle Conceptualisation, Design, Prototyping and Production
- Armoured Vehicle Test and Evaluation
- Armoured Vehicle Plant Turnkey/EPC Contracts
- Military Vehicle Technology
- Counterterrorism

OUR FACILITY

All our armoured vehicles and security equipment are manufactured at our fully equipped 180,000 square foot Industrial Complex located in Lagos, Nigeria.

This facility was commissioned by the Ministry of Defence of the Federal Republic of Nigeria in 2023.

Our facility provides us with the flexibility to scale our production output as required with a maximum production run of about 200 vehicles a batch.

With continuous reinvestment in state-of-the-art tools and equipment, Buckler Land Systems has established itself as a leader in the production of Armoured Vehicles and other Security equipment.

Among other cutting edge technologically advanced tools are a 2kw, 6m x 2m CNC Fibre Laser Machine, a 3m CNC Hydraulic Press, 3D Printers etc.

MILITARY VEHICLE ARMOURING

ARMOURED PERSONNEL CARRIERS | LIGHT TACTICAL VEHICLES | MRAPS

Military armoured vehicles provide protected mobility for armed forces operating in demanding and high-risk environments. Designed to support personnel movement, patrols and mission support, these platforms combine occupant protection with the mobility, durability and functionality required for military operations.

Modern military vehicle engineering integrates protective materials, specialised glazing and reinforced vehicle systems. Each platform must balance protection, payload and mobility, with its configuration determined by the intended role, operating terrain and assessed threats.

WHAT ARE MILITARY ARMOURED VEHICLES?

Military armoured vehicles are purpose-built or specially adapted platforms incorporating protective structures and systems to reduce exposure to defined ballistic threats and, where specifically engineered and tested, mine and blast effects. Their role is to improve personnel survivability while maintaining operational capability.

KEY FEATURES

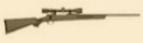
- Ballistic Protection: Armour steel, composites and other ballistic-resistant materials protect designated areas against specified projectile threats. Actual protection depends on the complete vehicle design and verified testing.
- Ballistic-Resistant Glazing: Multi-layer transparent armour provides defined ballistic resistance while supporting driver visibility and crew situational awareness.
- Mine and Blast Protection: Where specified, protective hull structures and blast-mitigating components are incorporated to address defined explosive threats. Blast protection is specific to the platform and its tested configuration.
- Protected Mobility: Suspension, braking, drivetrain and tyre systems are selected or upgraded to accommodate vehicle mass and operating conditions. Run-flat systems, where fitted, can provide limited continued mobility after tyre damage.
- Mission-Specific Configuration: Crew and troop accommodation, communications, observation systems, access arrangements and equipment stowage can be configured to suit the platform's intended military role.

VEHICLE CATEGORIES

- Armoured Personnel Carriers (APCs): Platforms primarily designed to transport troops with armoured protection.
- Light Tactical Vehicles (LTVs): Compact, mobile military platforms for patrol, liaison, reconnaissance and command support.
- Mine-Resistant Ambush-Protected Vehicles (MRAPs): Platforms designed to improve occupant survivability against specified mine, improvised explosive device and ambush threats.



BALLISTIC PROTECTION LEVEL

CLASSIFICATION				WEAPON		CARTRIDGE	CALIBER	TYPE	MANUFACTURER TYPE	BULLET VELOCITY
VPAM 2009	STANAG 4569	NIJ	CEN 1063							
VPAM VR 5		NIJ IIIA	B4		.357 Magnum .44 Magnum		0.38	FMs/CB	DAG Special	430 +/- 10
VPAM VR 6					SKS Carbine		7.62 x 39	FMJ/PB/FeC	PS Cold Hardened	720 +/- 10
VPAM VR7	STANAG LEVEL I		B5		223 Remington		5.56 X 45	FMJ/PB/SCP	SS 109	910 +/- 10
		NIJ III	B 6		308 Winchester		7.62 X 51	FMJ/PB/SC	DM 111	830 +/- 10
		NIJ III+	B6+		M-16A1		5.56 X 45	FMJ/HC	M 193	930 +/- 10
VPAM VR 8	STANAG LEVEL II				SKS Carbine		7.62 x 39	AP/FMJ/PB/HCI	BZ (API)	740 +/- 10
VPAM VR9		NIJ IV	B 7		308 Winchester		7.62 X 51	FMJ/PB/HC	P 80 (AP)	820 +/- 10
VPAM VR 10	STANAG LEVEL III				Dragunov		7.62 x 54 R	AP/WC/HC	B32 (API)	860 +/- 10

AP - Armor Piercing
API - Armor Piercing Incendiary
EN - European Norm
FMs/CB - Full Ms / Coned Bullet
FMJ - Full Metal Jacket
PB - Pointed Bullet
FeC - Mild Steel Core
SCP - Soft Core Penetrator
WC - Tungsten carbide
SC - Soft Core
HCI - Hard Core Incendiary
HC - Hard Core
M/S - Meters per second



BLAST PROTECTION LEVEL



CLASSIFICATION		WEAPON	LOCATION	CHARGE	TYPE
VPAM ERV	STANAG 4569				
VPAM ERV 2010 (Restricted) (May 18th 2011)	LEVEL 1, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	2 Hand Grenades DM51	Under foot area of Driver's Seat	60g Nitropenta	Cluster
VPAM ERV 2010 (Restricted) (May 18th 2011)	LEVEL 1, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	DM 31 Surrogate	Under foot area of Co Driver's Seat	350g Explosives	1.18kg Fragment AP Mine
VPAM ERV 2010 (Restricted) (May 18th 2011)	AEP-55, VOL. 3, Ed. C Vers. 1 (May 2014)	TNT Ball	Driver's side burst height 1 meter at a distance of 2 meters	15kg TNT	IED
VPAM ERV 2010 (Restricted) (May 18th 2011)		2 Hand Grenades DM51	Vehicle Roof above Driver's Position	60g Nitropenta	Cluster
	LEVEL 2a, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	Mine Surrogate	Pressure activated under any wheel or track	6kg	AT
	LEVEL 2b, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	Mine Surrogate	Under center of vehicle	6kg	AT
	LEVEL 3a, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	Mine Surrogate	Pressure activated under any wheel or track	8kg	AT
	LEVEL 3b, AEP-55, VOL. 2, Ed. C Vers. 1 (May 2014)	Mine Surrogate	Under center of vehicle	8kg	AT

AP Mine - Anti Personnel
AT Mine - Anti Tank
ERV- Expolsive Resistant Vehicle
IED - Improvised Explosive device

SPYDA ARMOURED PERSONNEL CARRIER



TACTICAL MOBILITY. ADVANCED PROTECTION. MISSION READINESS.

The SPYDA Armoured Personnel Carrier (APC) is a highly capable multi-role tactical vehicle engineered to deliver exceptional survivability, mobility, and operational versatility in hostile and high-risk environments. Built on proven Toyota 4x4 or Ford 4x4 heavy-duty platforms, the SPYDA combines battlefield-grade protection with the reliability and serviceability of globally trusted automotive systems.

Designed and manufactured by Buckler Land Systems, the SPYDA APC is purpose-built for military, law enforcement, internal security, peacekeeping, border patrol, convoy escort, and rapid response operations.

MISSION-FOCUSED DESIGN

The SPYDA APC has been engineered to provide maximum crew survivability while maintaining excellent off-road capability and operational flexibility. Its reinforced monocoque armoured capsule and advanced suspension architecture enable personnel deployment across urban, desert, forest, and rugged terrain environments.

The vehicle is configurable for a wide range of operational requirements including:

* Troop Transportation
* Counter-Insurgency Operations
* Internal Security Missions
* Border Surveillance
* VIP Tactical Escort
* Rapid Intervention Operations
* Special Forces Deployment
* Anti-Riot Operations
* Convoy Protection

BALLISTIC & BLAST PROTECTION

The SPYDA APC is available in multiple protection levels to suit mission requirements and threat environments.

Protection Capabilities Include:

* Certified ballistic steel armouring
* Multi-layer ballistic glass system
* Protection against high-velocity rifle ammunition
* Blast-resistant floor architecture
* Fragmentation protection
* Optional mine-resistant underbody enhancement
* Protected fuel tank and battery compartment
* VPAM Certified Protection
* CEN 1063 Ballistic Glass Standards
* NIJ Ballistic Protection Levels

PLATFORM OPTIONS

- **Toyota 4x4 Platform**

Built on Toyota's globally proven heavy-duty chassis platform, offering exceptional durability, reliability, and ease of maintenance in remote operating environments.

SPYDA ARMOURED PERSONNEL CARRIER



- **Ford 4x4 Platform**

Built on Ford's powerful tactical utility platform, delivering excellent payload capability, enhanced torque output, and superior operational performance under demanding conditions.

Both platforms are selected for their:

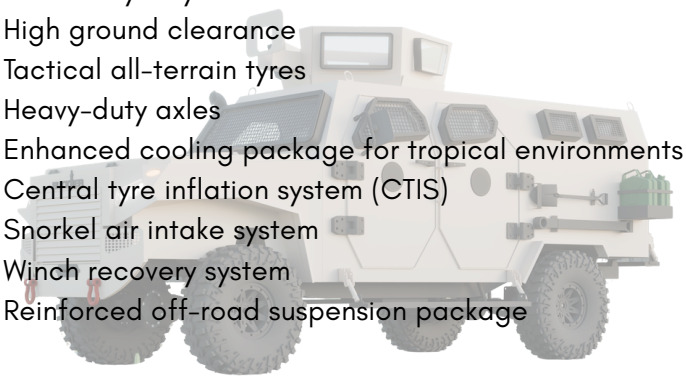
* Global parts availability
* Proven off-road reliability
* Ease of maintenance
* Long operational lifespan
* Excellent terrain adaptability

MOBILITY & PERFORMANCE

The SPYDA APC delivers outstanding mobility in both urban and off-road conditions, ensuring mission effectiveness across diverse operational theatres.

Key Mobility Features:

* Heavy-duty 4x4 drivetrain
* Upgraded suspension system
* Reinforced braking system
* Run-flat tyre system
* High ground clearance
* Tactical all-terrain tyres
* Heavy-duty axles
* Enhanced cooling package for tropical environments
* Central tyre inflation system (CTIS)
* Snorkel air intake system
* Winch recovery system
* Reinforced off-road suspension package



CREW CAPACITY & ERGONOMICS

The SPYDA APC is designed to transport personnel safely and comfortably during extended operational deployments.

Interior Features:

* Ergonomic blast-attenuating seating
* Configurable troop seating arrangement
* Air conditioning system
* Tactical communication integration
* Internal intercom system
* Weapon storage provisions
* Night operation lighting
* Anti-fatigue cabin design

Capacity:

* Driver
* Commander
* Tactical personnel seating configuration depending on mission requirements

TACTICAL SYSTEMS & OPTIONAL EQUIPMENT

The SPYDA APC can be configured with advanced tactical and mission-specific equipment packages.

Optional Systems:

* Roof-mounted turret system
* Remote Weapon Station (RWS)
* Gun ports

SPYDA ARMOURED PERSONNEL CARRIER



* 360-degree camera system
* Drone integration capability
* Public Address & Siren System
* Tactical strobe lighting
* GPS tracking system
* Battlefield communication suite
* Electronic countermeasure systems
* Fire suppression system
* Smoke grenade launchers

RELIABILITY IN EXTREME CONDITIONS

The SPYDA APC is developed for sustained operations in harsh environments including:

* High-temperature regions
* Desert terrain
* Flood-prone areas
* Urban conflict zones
* Remote rural operations

Its robust construction and mission-tested engineering ensure maximum uptime and reduced operational downtime.

MAINTENANCE & THROUGH-LIFE SUPPORT

Buckler Land Systems provides comprehensive through-life support solutions including:

* Operator training
* Maintenance training
* Spare parts support
* Technical assistance
* Fleet sustainment programs
* Field service support
* Armour integrity inspections
* Warranty support

BUILT FOR MODERN SECURITY OPERATIONS

The SPYDA APC represents the next generation of tactical armoured mobility — combining survivability, reliability, and operational effectiveness in one powerful platform.

Whether deployed for defence, law enforcement, or peacekeeping operations, the SPYDA delivers the protection and confidence required to operate effectively in today's complex security environment.

SPYDA LIGHT TACTICAL VEHICLE



RUGGED PROTECTION FOR MODERN SECURITY OPERATIONS

The SPYDA Armoured Light Tactical Vehicle (ALTV) is a highly durable and mission-adaptable protected mobility platform engineered to meet the demanding operational requirements of modern security and peacekeeping environments.

Built on the legendary Toyota Land Cruiser 70 Series chassis platform, the SPYDA ALTV combines the unmatched reliability of the Land Cruiser heritage with advanced protective engineering, enhanced durability, and superior off-road mobility.

Developed by Buckler Land Systems, the SPYDA is designed as a protected alternative to conventional unarmoured utility vehicles used in high-risk operational environments where personnel safety, survivability, and operational continuity are critical.

BUILT ON A PROVEN PLATFORM

For decades, the Toyota Land Cruiser 70 Series platform has earned a global reputation for reliability, simplicity, and exceptional terrain capability. The SPYDA ALTV leverages this proven foundation while integrating advanced protection technologies and heavy-duty tactical enhancements.

Platform Advantages:

- Proven reliability in harsh environments
- Excellent off-road capability
- High serviceability and ease of maintenance
- Global spare parts availability
- Long operational lifespan
- Strong load-carrying capability
- Optimised for African terrain conditions

The SPYDA retains the operational familiarity and rugged dependability of the Land Cruiser 70 Series while significantly improving personnel protection and mission readiness.

ENHANCED PERSONNEL PROTECTION

The SPYDA ALTV is engineered to provide enhanced occupant protection against security threats commonly encountered in volatile operational regions.

Protection Features Include:

- Armoured passenger cell
- Multi-layer ballistic glass system
- Reinforced doors and structural components
- Blast-resistant floor enhancement
- Protected fuel tank configuration
- Run-flat mobility system
- Reinforced heavy-duty suspension system

Optional Protection Standards:

- VPAM Protection Levels
- NIJ Ballistic Standards
- CEN 1063 Ballistic Glass Standards

MOBILITY WITHOUT COMPROMISE

The SPYDA ALTV is specifically engineered to maintain exceptional mobility despite increased protection levels. Its reinforced chassis architecture and upgraded drivetrain systems ensure reliable performance across difficult operational terrain.

SPYDA LIGHT TACTICAL VEHICLE



Mobility Features:

- Heavy-duty 4x4 drivetrain
- Enhanced suspension system
- Upgraded braking system
- Tactical all-terrain tyres
- Reinforced load-bearing structure
- Optimised weight distribution

The vehicle is capable of operating effectively across:

- Desert terrain.
- Flood-prone regions
- Rural and remote areas
- Urban environments
- Rough and unpaved roads

MISSION ADAPTABILITY

The SPYDA platform is configurable to support a broad range of security and operational requirements.

Suitable Roles Include:

- Border Security Operations
- Internal Security Patrol
- Peacekeeping Support
- Personnel Transportation
- Infrastructure Protection
- Rapid Response Operations
- Security Escort Duties
- Rural Mobility Operations
- Emergency Response Support



CREW COMFORT & OPERATIONAL EFFICIENCY

Long operational deployments require both protection and comfort. The SPYDA interior is designed to reduce fatigue while improving situational awareness and operational efficiency.

Interior Features:

- Ergonomic seating configuration
- Heavy-duty air conditioning system
- Enhanced cabin insulation
- Communication system integration
- Optimised visibility design
- Durable tactical interior finish
- Multiple storage configurations

ENGINEERED FOR AFRICAN CONDITIONS

The SPYDA ALTV has been specifically developed with African operating environments in mind. From extreme heat to poor road infrastructure, the platform is designed to withstand challenging operational conditions while minimising downtime and maintenance burden.

Key Environmental Advantages:

- Tropical cooling enhancement
- Dust-resistant intake systems
- Heavy-duty filtration systems
- Corrosion-resistant protection
- Reinforced chassis durability

SPYDA MRAP



ENGINEERED FOR SURVIVABILITY. BUILT FOR EXTREME OPERATIONAL ENVIRONMENTS.

The SPYDA MRAP (Mine Resistant Ambush Protected Vehicle) is a next-generation protected mobility platform developed to deliver superior crew survivability, exceptional off-road mobility, and operational reliability in high-threat environments.

Designed and manufactured by Buckler Land Systems, the SPYDA MRAP combines advanced monocoque armoured hull construction with globally proven automotive systems including a powerful Cummins diesel engine and heavy-duty ZF Friedrichshafen transmission platform.

Purpose-built for demanding operational conditions, the SPYDA MRAP provides enhanced protection against ballistic threats, explosive hazards, and hostile terrain while maintaining high levels of mobility, endurance, and crew comfort.

ADVANCED MONOCOQUE ARMOURED ARCHITECTURE

At the core of the SPYDA MRAP is a fully integrated **monocoque armoured hull**, engineered to maximise structural integrity, occupant survivability, and blast energy management.

Unlike conventional body-on-frame armoured vehicles, the SPYDA's monocoque design integrates the armoured structure directly into the vehicle's load-bearing architecture, delivering:

- Improved blast resistance
- Enhanced structural rigidity
- Reduced weak points
- Better weight distribution
- Increased crew protection
- Superior off-road durability

The armoured capsule is specifically designed to improve survivability in hostile operational environments while maintaining vehicle stability and long-term reliability.

CUMMINS POWERTRAIN PERFORMANCE

The SPYDA MRAP is powered by a high-performance Cummins turbo diesel engine engineered for heavy-duty tactical mobility and sustained operational endurance.

Engine Advantages:

- High torque output for difficult terrain
- Excellent reliability in extreme climates
- Proven heavy-duty performance
- Fuel-efficient operational capability
- Simplified maintenance support
- Global parts and service availability

The powertrain delivers the performance required for demanding operational environments including desert terrain, rural roads, urban conditions, and remote deployment zones.

SPYDA MRAP



ZF TRANSMISSION SYSTEM

To complement its powerful engine platform, the SPYDA MRAP integrates a heavy-duty ZF Friedrichshafen transmission system engineered for smooth power delivery and enhanced drivetrain durability.

- Transmission Benefits:
- Optimised torque transfer
- Enhanced off-road drivability
- Improved reliability under heavy loads
- Reduced driver fatigue
- Efficient power management
- Proven operational durability

The integration of the Cummins and ZF drivetrain package ensures exceptional mobility and long-term operational efficiency.

SUPERIOR PROTECTION CAPABILITY

The SPYDA MRAP is engineered to provide advanced protection for personnel operating in high-risk security environments.

Protection Features:

- Monocoque armoured hull
- Blast-resistant floor architecture
- Multi-layer ballistic glass system
- Reinforced crew compartment
- Protected fuel and critical systems
- Fragmentation protection
- Energy-absorbing seating system
- Run-flat mobility system

OPTIONAL PROTECTION STANDARDS:

- VPAM Certified Protection
- NIJ Ballistic Standards
- CEN 1063 Ballistic Glass Standards

TACTICAL MOBILITY & TERRAIN DOMINANCE

The SPYDA MRAP is designed to maintain high mobility across challenging terrain while preserving crew comfort and operational effectiveness.

Mobility Features:

- Heavy-duty 4x4 drivetrain
- Reinforced suspension system
- High ground clearance
- Central tyre inflation system (optional)
- Heavy-duty tactical axles
- All-terrain run-flat tyres
- Enhanced braking system

Operational Terrain Capability:

- Desert operations
- Flood-prone regions
- Rural deployment routes
- Mountainous terrain
- Urban operational environments
- Harsh off-road conditions

CREW CAPACITY & INTERIOR DESIGN

The SPYDA MRAP is engineered to transport personnel safely and efficiently during extended deployments.

SPYDA MRAP



INTERIOR FEATURES:

- Blast-attenuating seating
- Ergonomic crew layout
- Heavy-duty air conditioning system
- Internal communication system
- Tactical equipment storage
- Reduced noise and vibration levels
- Enhanced situational visibility

The interior design prioritises crew endurance, comfort, and operational efficiency during prolonged missions.

MISSION CONFIGURABILITY

The SPYDA MRAP can be configured for multiple operational and security roles.

Suitable Applications:

- Personnel Transportation
- Internal Security Operations
- Border Protection
- Peacekeeping Missions
- Infrastructure Security
- Rapid Response Deployment
- Convoy Escort Operations
- Security Patrol Operations



SPYDA ARMOURED AMBULANCE



PROTECTED MEDICAL MOBILITY FOR HIGH-RISK ENVIRONMENTS

The SPYDA Armoured Ambulance is a specialised protected medical response vehicle engineered to safely transport medical personnel and casualties through hostile, unstable, and high-risk operational environments.

Designed and manufactured by Buckler Land Systems, the SPYDA Armoured Ambulance combines advanced ballistic protection, rugged off-road mobility, and life-saving medical support capability within a highly reliable armoured platform.

Purpose-built for emergency response operations where conventional ambulances are vulnerable, the SPYDA enables safe casualty evacuation and protected medical intervention in environments affected by insecurity, civil unrest, terrorism, border instability, or hostile terrain conditions.

PROTECTED MEDICAL RESPONSE CAPABILITY

The SPYDA Armoured Ambulance is engineered to ensure that medical teams can operate safely while maintaining rapid access to injured personnel in dangerous operational zones.

The vehicle provides:

- Protected casualty evacuation capability
- Enhanced crew survivability
- Safe medical transport in hostile environments
- Reliable off-road emergency mobility
- Stable platform for medical intervention during transport

Its armoured structure enables continued emergency medical operations in situations where standard ambulances may be unable to safely operate.

ADVANCED BALLISTIC PROTECTION

The SPYDA Armoured Ambulance integrates a reinforced armoured capsule designed to protect both occupants and critical medical equipment.

Protection Features Include:

- Ballistic armoured passenger cell
- Multi-layer ballistic glass system
- Reinforced side panels and doors
- Blast-resistant floor enhancement
- Protected fuel tank configuration
- Run-flat tyre system
- Fragmentation protection

Optional Protection Standards:

- VPAM Certified Protection
- NIJ Ballistic Standards
- CEN 1063 Ballistic Glass Standards

The protection architecture is designed to improve survivability during emergency medical response operations in high-threat environments.

MEDICAL INTERIOR CONFIGURATION

The SPYDA Armoured Ambulance features a purpose-designed medical treatment compartment engineered for functionality, safety, and patient comfort.

SPYDA ARMOURED AMBULANCE



Interior Medical Features:

- Stretcher mounting system
- Emergency medical seating
- Oxygen cylinder integration
- Medical equipment storage compartments
- Trauma response workspace
- Interior LED medical lighting
- Climate-controlled treatment area
- Anti-bacterial interior finish
- Shock-reduced patient transport design

Optional Equipment:

- Advanced life support (ALS) configuration
- Basic life support (BLS) configuration
- Cardiac monitoring integration
- Suction systems
- Defibrillator integration
- Medical refrigeration compartment
- Communication systems integration

RUGGED MOBILITY & OPERATIONAL RELIABILITY

The SPYDA Armoured Ambulance is designed to maintain high mobility across difficult terrain and poor infrastructure conditions while ensuring patient stability during transport.
Mobility Features:

- Heavy-duty 4x4 drivetrain
- Reinforced suspension system
- Heavy-duty braking system
- High ground clearance
- Tactical all-terrain tyres
- Run-flat mobility capability
- Enhanced tropical cooling package

Operational Environments:

- Urban emergency zones
- Remote rural areas
- Conflict-affected regions
- Border environments
- Flood-prone terrain
- Desert and harsh climate conditions

PLATFORM RELIABILITY

Built on globally proven heavy-duty vehicle platforms, the SPYDA Armoured Ambulance is engineered for:

- Long operational lifespan
- Reduced downtime
- Simplified maintenance
- High parts availability
- Reliability under extreme operating conditions

The platform's rugged engineering ensures dependable medical response capability even in the most demanding environments.

CREW & PATIENT SAFETY

The SPYDA Armoured Ambulance prioritises the safety of:

- Medical personnel
- Patients
- Drivers
- Emergency response teams

SPYDA ARMOURED AMBULANCE



Safety Enhancements Include:

- Energy-absorbing seating systems
- Reinforced medical equipment retention systems
- Fire suppression options
- Emergency escape access points
- Enhanced visibility systems
- Night operation lighting

MISSION APPLICATIONS

The SPYDA Armoured Ambulance is suitable for:

- Emergency Medical Services (EMS)
- Military Medical Support
- Peacekeeping Operations
- Disaster Response
- Humanitarian Missions
- Internal Security Operations
- Industrial Site Emergency Response
- High-Risk VIP Medical Escort

THROUGH-LIFE SUPPORT

Buckler Land Systems provides comprehensive aftersales and operational support services including:

- Operator training
- Medical crew familiarisation
- Technical support
- Spare parts supply
- Maintenance support
- Fleet sustainment programs
- Warranty coverage
- Armour integrity inspections



ARMOURED TOYOTA LC 79 SERIES



MISSION-READY. VPAM 7 CERTIFIED.

The VPAM 7 Armoured Toyota Land Cruiser 79 Series SUV is a purpose-built, no-compromise armoured vehicle engineered for high-risk operations in combat zones, border security patrols, counter-terror missions, and hostile terrain. Renowned for its rugged simplicity and legendary reliability, the 79 Series becomes a fortress on wheels when enhanced to VPAM BRV 2009 VR7 standards.

Designed for military units, government task forces, NGOs, and security contractors operating in volatile environments, this platform delivers unmatched durability, survivability, and off-road capability under fire.

Independently tested and certified to the VPAM BRV 2009 VR7 standard, the armoured Land Cruiser 79 Series offers all-around protection against:

- 7.62x51mm NATO rounds
- Armor-piercing ammunition (e.g., 7.62x39mm API BZ, 5.56x45mm SS109)
- Grenade fragments and blast pressure (compliant with ERV 2010)

This level of protection is typically reserved for high-level military and diplomatic armoured vehicles, now available in a highly capable 4x4 workhorse platform.

KEY FEATURES

1. Ballistic & Blast Protection

- 360° armoured capsule using VPAM 7-certified ballistic steel and composite materials
- Bullet-resistant multi-layer glass with anti-spall laminate
- Roof and underbody mine/blast protection
- Armoured battery, ECU, fuel tank, and vital drivetrain components
- Door overlaps, reinforced hinges, and structural pillar upgrades
- Run-flat tyre inserts (full mobility after deflation)
- Optional: Escape hatch, 360 degree Turret, gun ports, surveillance and comms integration

2. Platform & Powertrain

- Base Vehicle: Toyota Land Cruiser 79 Series (Single or Double Cab converted SUV)
- Engine Options:
  - 4.5L V8 turbo diesel (1VD-FTV)
  - 4.2L 6-cylinder diesel (1HZ - for non-EU markets)
- Transmission: 5-speed manual or upgraded automatic
- Drivetrain: Full-time 4WD with locking front and rear differentials
- Chassis Reinforcement: Upgraded leaf springs, shocks, and anti-roll systems

ARMOURED TOYOTA LC 79 SERIES



3. Interior & Mission Fit-Out

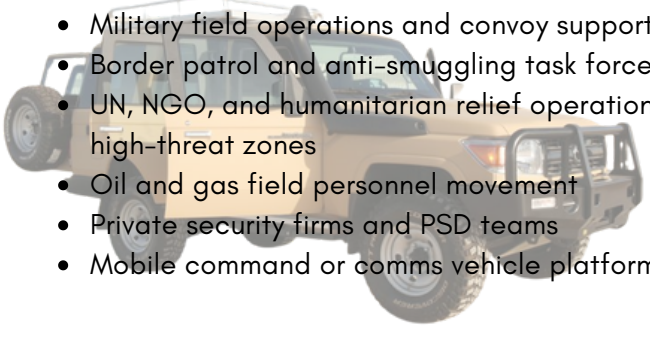
- Configurable seating (2+2, 2+3, 6-seater troop carrier)
- Ruggedised interior for field durability
- Optional air-conditioning, auxiliary power, and red/white tactical lighting
- Satellite comms, tactical radio pre-wiring, and GPS options
- Storage lockers, weapon racks, or custom mission kits (upon request)

TECHNICAL SPECIFICATIONS

- Ballistic Rating: VPAM BRV 2009 VR7 / ERV 2010
- Curb Weight (Armoured): 4,800 – 5,300 kg (variant dependent)
- Seating Capacity: 4 – 6 occupants (mission configurable)
- Payload Capacity: Up to 800 kg
- Run-Flat Range: 50–80 km post-deflation
- Top Speed (limited): ~130 – 160 km/h
- Fuel Tank: Dual 90L tanks (armoured)

APPLICATION

- Military field operations and convoy support
- Border patrol and anti-smuggling task forces
- UN, NGO, and humanitarian relief operations in high-threat zones
- Oil and gas field personnel movement
- Private security firms and PSD teams
- Mobile command or comms vehicle platform



COMPLIANCE & CONSTRUCTION

- Armouring integrated by certified military-grade specialists
- Compliance with VPAM BRV 2009 and ERV 2010 standards
- Retains Toyota reliability, serviceability, and spare parts compatibility
- Designed for extreme environments (desert, jungle, mountain, conflict zones)



BIG MAC, ARMOURED CABIN



PROTECTED MOBILITY. ENHANCED SURVEILLANCE. OPERATIONAL READINESS.

- **A MOBILE COMMAND AND SECURITY SOLUTION**

The BIG MAC Mobile Armoured Cabin is a purpose-designed protected platform developed to support security operations, field coordination, surveillance and mission-critical personnel in demanding environments.

Combining a reinforced structural framework, specified ballistic protection components, integrated surveillance technology and onboard support systems, BIG MAC is designed to provide a secure and functional working environment for mobile or temporary deployment.
Its integrated design brings together protection, situational awareness, communications and essential onboard amenities in one versatile platform.

KEY CAPABILITIES

- Ballistic Protection: Specified RAMOR 500 high-hardness armour steel, 6.5 mm thick, and BR-7-grade ballistic-resistant laminated glazing form the basis of the cabin's protective envelope. Dedicated ballistic steel gun ports and run-flat tyres are also included.
- Integrated Surveillance: A long-range dual-sensor camera system with thermal imaging and night vision supports observation in varying light and weather conditions. A bird's-eye-view camera system provides additional visibility around the vehicle.
- Communications and Monitoring: Onboard the BIG MAC there is provision for GPS and satellite communications, supported by three 21-inch touchscreen monitors, enables integrated monitoring and information display.
- Independent Power Provision: An electrical power package incorporating an inverter, two lithium batteries and six solar panels is equipped to support onboard electrical systems

DESIGNED FOR DEMANDING ENVIRONMENTS

BIG MAC combines a heavy-duty structural framework with reinforced components and an integrated equipment layout. Its intended role is to provide a protected, adaptable platform for security,
surveillance and field-support duties where mobility and reliable onboard systems are important.

BIG MAC, ARMOURED CABIN



ENGINEERED FOR OPERATIONAL SUPPORT

360° PROTECTION AND TURRET COMPATIBILITY

All-Round Observation and Defence Provisions

The BIG MAC Mobile Armoured Cabin features strategically positioned 360-degree gun ports to provide all-round defensive coverage from within the protected cabin.

The roof is designed to accommodate an overhead turret compatible with the M2 Browning heavy machine gun, providing a provision for an externally mounted weapon system, subject to the selected turret configuration and integration requirements.

These features complement the cabin's specified ballistic-resistant glazing, armour steel construction and integrated surveillance systems, supporting its intended role in demanding security and field operations.

MOBILITY AND STRUCTURAL INTEGRITY

The BIG MAC incorporates a reinforced steel structural framework, chassis stiffeners and high-strength connection brackets to support the overall assembly.

Its mobility-related components include:

- Heavy-duty shock absorbers for off-road use.
- Eight specified 265/75R16 112S tyres, with run-flat provisions.
- Four outriggers to support stabilisation when deployed
- A robust framework intended to accommodate the cabin's protective panels and onboard equipment.

SURVEILLANCE AND SITUATIONAL AWARENESS

The integrated observation package is designed to enhance the operator's awareness of the surrounding environment.

Key equipment includes:

- Motorised telescopic mast: Equipped with an extension range of 3-20 metres, with self-locking capability at selected heights.
- Long-range dual-sensor camera: Thermal imaging, night vision, pan-and-tilt control, two-way audio and weather-resistant construction.
- Bird's-eye-view camera: Night-view capability, split-screen display, GPS integration and driver assistance features.
- Operator displays: Three 21-inch monitors specified for multi-channel video input and split-screen monitoring.

Together, these systems provide a foundation for centralised observation and monitoring

BIG MAC, ARMOURED CABIN



CREW COMFORT AND ONBOARD SUPPORT

The BIG MAC's specified interior provisions are intended to support up to four (4) personnel during extended field assignments.

The onboard amenities include:

- Air-conditioning and forced-air extraction.
- A dedicated water pump, chiller, freezer and microwave.
- Two ergonomic chairs and a designated sleep pod.
- A vacuum toilet.
- An automatic fire-suppression system.
- An integrated solar-assisted electrical package.

These provisions are intended to improve the usability of the cabin during field deployment.

APPLICATIONS

The BIG MAC is intended for consideration in roles such as:

- Mobile security and command support.
- Surveillance and observation operations.
- Protected field coordination.
- Temporary security posts and operational support.
- Remote-site monitoring and communications support.

BIG MAC – PROTECTION MEETS FUNCTIONALITY

Designed around the integration of structural reinforcement, specified ballistic protection materials, surveillance systems and onboard support facilities, BIG MAC offers a consolidated platform for demanding security and field-support applications.

Protection|Awareness|Operational Support



ARMOURED TOYOTA LANDCRUISER



UNMATCHED PROTECTION, ULTIMATE PRESTIGE

The VPAM 7 Armoured Toyota Land Cruiser 300 represents the pinnacle of civilian and VIP protection, combining legendary off-road performance with military-grade ballistic security. Engineered for high-risk environments, this luxury SUV is ideal for diplomatic missions, corporate executives, security escorts, and private individuals requiring uncompromising protection in volatile regions.

Certified to VPAM BRV 2009 VR7 (the German standard for bullet-resistant vehicles), this armoured Land Cruiser withstands threats from high-powered rifles including 7.62x51mm NATO rounds. The certification also covers protection from lateral blasts and explosive fragmentation as defined by ERV 2010, ensuring survivability against a wide array of threats.

KEY FEATURES

1. Armour & Protection

- Ballistic steel and composite armor throughout the cabin
- Multi-layered, bullet-resistant glass (VPAM 7-rated)
- Reinforced roof and floor with underbody blast protection
- Overlap system at all doors and pillars to prevent bullet penetration
- Run-flat tyre system (up to 80 km after deflation)
- Armoured fuel tank and battery casing
- Optional mine protection and blast seats

2. Platform

- Base Vehicle: Toyota Land Cruiser 300 Series (VX, GR Sport, or Sahara trims available)
- Engine Options: 3.3L twin-turbo diesel V6 or 3.5L twin-turbo petrol V6
- Transmission: 10-speed automatic with full-time 4WD
- Suspension: Upgraded heavy-duty suspension system to compensate for additional weight without compromising comfort or off-road agility

3. Interior & Comfort

- Luxurious leather upholstery and climate-controlled seating
- Touchscreen infotainment system with navigation
- Rear entertainment package (optional)
- Privacy glass and curtains for discreet travel
- Intercom and PA system (for secure communication)
- Optional fire suppression system and emergency escape hatch

TECHNICAL SPECIFICATIONS

- Armouring Level: VPAM VR7
- Curb Weight: Approx. 4,800 – 5,200 kg (depending on configuration)
- Payload Capacity: Approx. 500 – 800 kg
- Seating Capacity: Up to 5 occupants
- Top Speed (governed): ~160 km/h
- Fuel Tank: Armoured, 110L capacity

ARMOURED TOYOTA LANDCRUISER



APPLICATIONS

- Diplomatic convoy escort
- Government and military personnel transport
- High-net-worth individual (HNWI) security
- Executive protection in high-threat regions
- Corporate or NGO operations in unstable environments

COMPLIANCE AND TESTING

- Independently tested and certified in accordance with VPAM BRV 2009 and ERV 2010 standards
- Built by OEM-approved armouring specialists
- Maintains original Toyota warranty (partial, depending on armouring provider)

CONCLUSION

The VPAM 7 Armoured Toyota Land Cruiser 300 is not just a vehicle—it is a mobile fortress on wheels, engineered for survivability, reliability, and comfort. Whether navigating rugged terrain or hostile urban environments, it guarantees secure mobility without drawing unwanted attention.





ARMOURED TOYOTA HIACE



SECURE MOBILITY FOR TEAMS, DELEGATIONS, AND VIP

The VPAM 7 Armoured Toyota Hiace Bus offers secure, high-capacity transportation without compromising on protection, comfort, or mobility. Engineered to transport up to 10 passengers safely through high-risk zones, it is the preferred solution for government convoys, diplomatic movements, corporate security operations, and NGO deployments in volatile environments.

Built to meet the rigorous VPAM BRV 2009 VR7 ballistic standard, this armoured Hiace provides all-around protection against rifle fire and explosive threats, while maintaining Toyota's renowned reliability and serviceability.

The armoured Hiace is certified to VPAM BRV 2009 VR7, ensuring protection against:

- 7.62x51mm NATO rifle rounds
- Armor-piercing and intermediate threats (e.g., 5.56x45mm, 7.62x39mm)
- Blast threats from hand grenades and IED fragments (ERV 2010 compliant)

Each unit is independently tested and built to exacting standards that prioritize passenger survivability and structural integrity in the most hostile environments.

KEY FEATURES

1. Ballistic & Blast Protection

- 360° VPAM 7-rated armouring using ballistic steel and advanced composites
- Bullet-resistant multi-layered glass with internal anti-spall treatment
- Armoured roof and underfloor blast protection
- Overlap protection at all door seams and structural pillars
- Armoured fuel tank, battery, and ECU
- Run-flat tyre system for emergency escape after deflation
- Optional: roof escape hatch, intercom system, surveillance cameras, and oxygen system

2. Platform & Powertrain

- Base Vehicle: Toyota Hiace 2.8L Diesel or Petrol (Long or Super Long Wheelbase)
- Engine: 2.8L 4-cylinder turbo diesel (approx. 174 hp)
- Transmission: 6-speed automatic or manual
- Drivetrain: Rear-wheel drive or optional 4x4 conversion
- Suspension: Upgraded heavy-duty springs and dampers for armoured load

ARMOURED TOYOTA HIACE



3. Interior Configuration & Comfort

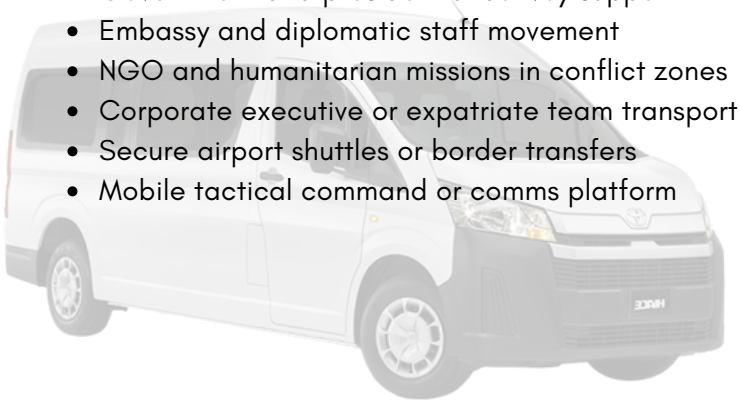
- Configurable seating: 8 to 10 passengers (VIP, staff, tactical team layouts)
- Reinforced modular seating with optional blast mitigation
- Dual-zone air conditioning with rear blower units
- Optional VIP layout with reclining leather seats, tables, and media system
- Tactical lighting, PA system, and emergency exit features available

TECHNICAL SPECIFICATIONS

- Ballistic Protection: VPAM BRV 2009 VR7 / ERV 2010
- Curb Weight: ~4,800 – 5,400 kg (depending on configuration)
- Seating Capacity: Up to 16 occupants
- Payload: 500 – 800 kg (based on layout)
- Run-flat Distance: 50–80 km after tyre deflation
- Fuel Tank: Armoured, 70L capacity
- Top Speed: ~130 – 150 km/h (governed for safety)

APPLICATIONS

- Government and presidential convoy support
- Embassy and diplomatic staff movement
- NGO and humanitarian missions in conflict zones
- Corporate executive or expatriate team transport
- Secure airport shuttles or border transfers
- Mobile tactical command or comms platform



COMPLIANCE & BUILD INTEGRITY

- Built by certified armouring firms in accordance with VPAM BRV 2009 VR7 and ERV 2010 standards
- Maintains full functionality of original Toyota systems (braking, lighting, diagnostics)
- Easy servicing with Toyota global parts availability
- Armouring integration preserves factory appearance and branding

CONCLUSION

The VPAM 7 Armoured Toyota Hiace Bus is a trusted asset for secure group transportation in high-threat zones. Whether moving diplomats, VIP teams, or humanitarian personnel, it ensures mobility without vulnerability—delivering peace of mind with every journey.



ARMOURED TOYOTA COASTER



GROUP TRANSPORT WITH CERTIFIED BALLISTIC PROTECTION

The VPAM 7 Armoured Toyota Coaster Bus is the gold standard in secure passenger transport, purpose-built for high-risk environments where safety and capacity are critical. With seating for up to 18 occupants and certified VPAM BRV 2009 VR7 protection, this vehicle is engineered to safeguard diplomats, corporate teams, security personnel, and aid workers while in transit.

Trusted by governments, embassies, NGOs, and private security providers, the armoured Coaster balances functionality, comfort, and military-grade ballistic resistance—making it one of the most reliable secure mobility platforms for mass personnel movement.

This vehicle is certified to VPAM BRV 2009 VR7, the German ballistic testing standard recognised globally for its stringent protection criteria. It offers protection against:

- 7.62x51mm NATO rifle rounds
- Armor-piercing ammunition and automatic weapons fire
- Grenade fragments and lateral blast effects (ERV 2010 compliant)

Each vehicle undergoes independent testing to ensure survivability in the event of armed attacks or explosive threats.

KEY FEATURES

1. Ballistic & Blast Protection

- Full perimeter VPAM 7-rated armouring using ballistic steel and composite panels
- Multi-layered bullet-resistant glass with internal anti-spall coating
- Roof and underbody blast protection to counter grenades and IEDs
- Armoured fuel tank, battery, and engine control modules
- Door overlap protection and reinforced structural pillars
- Run-flat tyre system (travel up to 80 km after deflation)
- Optional features: escape hatch, emergency lighting, intercom, surveillance system

2. Powertrain & Platform

- Base Model: Toyota Coaster (Standard or Long Wheelbase)
- Engine: 4.0L or 4.2L diesel engine
- Transmission: 5-speed manual or automatic
- Suspension: Upgraded heavy-duty suspension to support armoured weight
- Drivetrain: Rear-wheel drive with reinforced axles

ARMOURED TOYOTA COASTER



3. Interior Layout & Comfort

- Seating capacity: 14 to 18 passengers (configurable)
- Durable, easy-to-clean interior finishes
- Optional VIP executive seating (leather recliners, individual AC vents)
- Dual-zone air conditioning and auxiliary rear climate units
- Custom options: communication systems, CCTV, emergency escape tools

TECHNICAL SPECIFICATIONS

- Ballistic Standard: VPAM BRV 2009 VR7 / ERV 2010
- Curb Weight (Armoured): ~5,500 – 6,200 kg
- Payload Capacity: ~800 kg
- Top Speed (limited): 110 – 130 km/h
- Fuel Tank: Armoured, 95L capacity
- Run-Flat Range: Up to 80 km after tyre deflation
- Seating: 14–18 passengers depending on interior configuration

APPLICATIONS

- Government and security agency personnel transport
- Diplomatic convoys and foreign embassy group movements
- Corporate workforce transport in conflict-prone regions
- NGO operations in humanitarian response zones
- Oil, gas, and mining crew logistics in remote or high-risk areas



CONCLUSION

The VPAM 7 Armoured Toyota Coaster Bus delivers the rare combination of high-capacity passenger transport and battle-tested ballistic protection. Whether you're moving diplomats, mission-critical teams, or security personnel, it ensures safe passage in even the most unpredictable operational landscapes. Trusted worldwide, it is the backbone of secure group mobility.



ARMOURED TOYOTA HILUX TRUCK



TACTICAL STRENGTH. BALLISTIC SECURITY. BUILT TO SURVIVE.

The VPAM 7 Armoured Toyota Hilux GR Sport is a rugged, performance-tuned pickup that's been transformed into a military-grade security vehicle—engineered to operate in some of the world's most hostile environments. Fusing the legendary reliability of the Toyota Hilux with advanced VPAM BRV 2009 VR7-certified protection, this platform is ideal for security forces, government agencies, private military contractors, and asset protection teams.

Whether it's navigating conflict zones, escorting convoys, or serving as a rapid-response unit, this armoured Hilux GR Sport is built for mobility under fire.

Tested and certified to VPAM BRV 2009 VR7, the vehicle offers 360° ballistic protection against:
- 7.62x51mm NATO rounds
- Intermediate and armor-piercing threats (e.g. 7.62x39mm, 5.56x45mm SS109)
- Fragmentation and lateral blast damage from hand grenades (ERV 2010 compliant)

Each vehicle undergoes rigorous testing and independent certification, ensuring maximum occupant protection in real-world threat scenarios.

KEY FEATURES

1. Ballistic & Blast Protection
- Full VPAM 7-certified armouring using high-hardness ballistic steel and composite panels
- Multi-layer bullet-resistant glass with anti-spall inner layer
- Roof and underbody protection against grenade and light IED blasts
- Armoured battery, fuel tank, ECU, and critical components
- Reinforced structural pillars, hinges, and door overlaps
- Run-flat tyre system capable of maintaining mobility after deflation
- Optional: escape hatch, gun ports, external surveillance cameras, fire suppression

2. Performance & Platform
- Base Model: Toyota Hilux GR Sport
- Engine: 2.8L turbo diesel engine (204 hp, 500 Nm torque)
- Transmission: 6-speed automatic with 4WD
- Suspension: Upgraded GR Sport suspension with enhanced shocks, tuned for armoured weight
- Braking: Reinforced brakes and load-sensitive proportioning

ARMOURED TOYOTA HILUX TRUCK



3. Tactical Interior & Utility

• Configurable seating for 4-5 personnel
• Option for communications system, tactical lighting, and GPS tracking
• Rear tray can be outfitted for equipment storage, drone deployment, or ballistic shield racks
• Dual-zone climate control, infotainment screen, and driver assist features retained
• Optional blackout mode and red-light tactical interior

TECHNICAL SPECIFICATIONS

• Ballistic Rating: VPAM BRV 2009 VR7 / ERV 2010
• Curb Weight (Armoured): Approx. 4,500 - 4,900 kg
• Payload Capacity: Up to 600-700 kg (depending on configuration)
• Top Speed: ~130-150 km/h (governed for safety)
• Fuel Tank: Armoured, 80L capacity
• Run-Flat Range: 50-80 km post-deflation

APPLICATIONS

• Military patrol or recon missions
• Government and presidential escort fleets
• Diplomatic motorcade support
• Anti-smuggling and border patrol operations
• Private security and tactical response teams
• High-value asset transport





MILITARY VEHICLE REPAIR, REFURBISHMENT, UPGRADE & MODERNIZATION

Restoring Capability. Enhancing Protection. Extending Operational Life.

KEEPING MILITARY FLEETS MISSION-READY

At Buckler Land Systems (BLS), we understand that the operational effectiveness of military forces depends on the reliability, survivability and sustained availability of their vehicle fleets.

As an armoured vehicle manufacturer and defence engineering company, Buckler Land Systems provides integrated engineering solutions for the repair, refurbishment, upgrade, modernization and life-extension of military vehicles and tactical mobility platforms.

Our capabilities are designed to restore ageing and battle-worn vehicles, improve existing fleet performance, incorporate modern technologies and extend the operational service life of military assets.

Through our manufacturing infrastructure, technical expertise and engineering capabilities, we support defence institutions seeking to maximize fleet availability, reduce lifecycle costs and maintain operational readiness.

OUR CORE CAPABILITIES

1.MILITARY VEHICLE REPAIR & RESTORATION

Restoring Reliability. Recovering Operational Capability.

Buckler Land Systems provides comprehensive repair and restoration services for military vehicles affected by mechanical failure, structural deterioration, intensive operational use and demanding environmental conditions.

Our services include:

- Comprehensive vehicle inspection, fault diagnosis and technical assessment.
- Engine, transmission, drivetrain and powertrain repairs.
- Suspension, steering, braking and axle system repairs.
- Electrical system troubleshooting, rewiring and restoration.
- Chassis, hull and structural repairs.
- Hydraulic and pneumatic system servicing.
- Cooling, fuel delivery and auxiliary system repairs.
- Replacement and fabrication of damaged or obsolete components.
- Corrosion treatment, surface restoration and protective finishing.
- Post-repair testing, inspection and quality assurance.

Our Objective: Return unserviceable or degraded military vehicles to safe, reliable and operationally effective condition.

2.MILITARY VEHICLE REFURBISHMENT

Renewing Assets. Extending Service Life.

Our refurbishment programmes are designed to restore military vehicles to defined technical, functional and operational standards while preserving the value of existing defence investments.

Depending on vehicle condition and customer requirements, refurbishment may involve partial restoration or comprehensive vehicle rebuilding.

Our refurbishment capabilities include:

- Complete vehicle stripping, inspection and condition assessment.
- Overhaul or replacement of major mechanical assemblies.

MILITARY VEHICLE REPAIR, REFURBISHMENT, UPGRADE & MODERNIZATION

- Hull, chassis and bodywork rehabilitation.
- Replacement of worn interior and exterior components.
- Restoration of electrical and electronic systems.
- Cab, crew compartment and ergonomic improvements.
- Replacement of deteriorated seals, fittings and protective materials.
- Surface preparation, repainting and corrosion protection.
- Reassembly, functional testing and acceptance inspection.

Our Objective: Deliver refurbished vehicles with improved reliability, renewed operational capability and extended useful service life.

3.MILITARY VEHICLE UPGRADES

Improving Performance. Enhancing Protection.

Buckler Land Systems offers vehicle upgrade solutions that address evolving operational requirements and improve the performance, protection and functionality of existing military platforms.

Our engineering approach enables selected vehicle systems to be improved without necessarily requiring complete platform replacement.

Mobility & Performance Upgrades

- Powertrain and transmission improvements.
- Suspension reinforcement and load-bearing enhancements.
- Braking and steering system upgrades.
- Cooling system optimization.
- Electrical power generation and distribution upgrades.

Protection & Survivability Upgrades

- Vehicle armour enhancement and ballistic protection improvements.
- Armoured cabin and crew compartment reinforcement.
- Ballistic glazing replacement and enhancement.
- Underbody and structural protection improvements, subject to engineering assessment.
- Improved crew seating and occupant safety systems.

Operational & Crew Systems

- Improved driver visibility and situational awareness.
- Vehicle communication and navigation system integration.
- Lighting and electrical system modernization.
- Improved climate control and crew comfort.
- Ergonomic improvements for extended deployments.

Our Objective: Enhance the performance, safety, protection and operational usefulness of existing military vehicles.

MILITARY VEHICLE REPAIR, REFURBISHMENT, UPGRADE & MODERNIZATION

4. MILITARY VEHICLE MODERNIZATION

Integrating Modern Technology into Proven Platforms.

Military fleets must continuously evolve to meet changing operational environments, technological developments and mission requirements.

Buckler Land Systems provides modernization solutions aimed at transforming legacy military vehicles into more capable, reliable and technologically relevant platforms.

Our modernization programmes may incorporate:

- Integration of modern vehicle electronics and digital instrumentation.
- Upgraded electrical architecture and power management.
- Advanced communication and navigation interfaces.
- Driver assistance and enhanced visibility systems.
- Modernized vehicle monitoring and diagnostic systems.
- Improved protection systems and crew safety provisions.
- Integration of compatible mission-support equipment.
- Reliability, maintainability and serviceability enhancements.

Each modernization programme is developed around the vehicle's original architecture, technical feasibility, operational requirements and the customer's desired performance outcomes.

Our Objective: Bridge the gap between legacy military platforms and contemporary operational requirements while maximizing the value of existing defence assets.

PLATFORMS WE SUPPORT

Buckler Land Systems' engineering and refurbishment services are intended to support a broad range of military and security mobility platforms, subject to platform-specific technical assessment.

- **Armoured Personnel Carriers (APCs):** Wheeled armoured platforms used for protected personnel mobility.
- **Mine-Resistant Ambush Protected Vehicles (MRAPs):** Specialist protected mobility vehicles operating in high-risk environments.
- **Light Tactical Vehicles (LTVs):** Light military utility, patrol and tactical mobility platforms.
- Military Logistics Vehicles: Troop carriers, military trucks, supply vehicles and specialist transport platforms.
- **Armoured Utility & Support Vehicles:** Command vehicles, armoured ambulances and other specialized military support platforms.
- **Legacy Military Vehicles:** Ageing and discontinued platforms requiring mechanical restoration, component replacement or lifecycle-extension solutions.

PASGT BALLISTIC HELMET & BODY ARMOUR VEST

ENGINEERED FOR PROTECTION. DESIGNED FOR THE MISSION. ADVANCED PERSONAL BALLISTIC PROTECTION

Buckler Land Systems offers the PASGT (Personnel Armour System for Ground Troops) Ballistic Helmet and Body Armour Vest, designed to provide protective coverage, operational comfort and mobility for military personnel, law enforcement officers and security professionals operating in high-risk environments.

Our ballistic protection solutions combine robust protective construction with practical, mission-oriented design to support personnel across demanding operational conditions.

PASGT BALLISTIC HELMET

HEAD PROTECTION WITHOUT COMPROMISING OPERATIONAL MOBILITY

The Buckler PASGT Ballistic Helmet is designed to provide protective coverage for the head while maintaining the comfort, stability and mobility required during extended operations.

Key Features

- Ballistic Protection: Protective shell designed to resist specified ballistic and fragmentation threats, subject to certified protection ratings.
- Durable Construction: High-performance ballistic composite materials engineered for strength and impact resistance.
- Ergonomic Design: Traditional PASGT profile offering extended coverage around the sides and rear of the head.
- Secure Fit: Adjustable retention and suspension system for improved stability and comfort.
- Operational Versatility: Suitable for military, tactical law enforcement and security operations.
- Mission-Ready Finish: Durable exterior finish with configuration options to suit operational requirements.

PASGT BALLISTIC BODY ARMOUR VEST

DEPENDABLE TORSO PROTECTION FOR HIGH-RISK OPERATIONS

The Buckler PASGT Ballistic Vest is designed to provide protective coverage for vital torso areas while supporting the movement, flexibility and endurance required of personnel in the field.

Key Features

- Ballistic Protection: Multi-layer protective construction designed for specified ballistic and fragmentation threats.
- Extended Coverage: Protective design covering key areas of the torso.
- Adjustable Fit: Secure fastening and adjustment systems accommodating different body sizes.
- Operational Comfort: Ergonomic construction supporting prolonged wear and personnel mobility.
- Durable Exterior: Heavy-duty fabric and reinforced stitching for demanding field conditions.
- Mission Adaptability: Configurations suitable for defence, law enforcement and institutional security applications.

APPLICATIONS

- Armed Forces and Military Operations
- Law Enforcement and Tactical Units
- Border Security and Patrol Operations
- Peacekeeping and Stabilisation Missions
- Critical Infrastructure and Security Protection

THE BUCKLER ADVANTAGE

Protection. Reliability. Operational Readiness.

At Buckler Land Systems, we recognise that personnel protection is fundamental to mission success. Our approach to ballistic protection emphasises dependable equipment, practical ergonomics and solutions tailored to the operational requirements of defence and security institutions.

From armoured mobility platforms to personal protective equipment, Buckler Land Systems is committed to supporting comprehensive protection solutions for personnel operating in challenging environments.

PASGT BALLISTIC HELMET & BODY ARMOUR VEST

PASGT BALLISTIC HELMET

The Buckler Land Systems PASGT Ballistic Helmet is a military-grade protective headgear solution designed for personnel operating in high-threat environments. The proposed rifle-resistant configuration incorporates advanced ballistic composite materials and an ergonomic suspension system to provide enhanced protection against specified small-arms threats.



Technical Specifications

Parameter	Proposed Specification
Product Type	PASGT-Style Rifle-Resistant Ballistic Helmet
Ballistic Protection	Designed for specified 5.56 × 45 mm and 7.62 × 39 mm threats, subject to testing
Additional Threat Coverage	7.62 × 51 mm NATO, subject to ammunition type and certification
Protection Standard	NIJ 0106.01 helmet testing, supplemented by rifle-threat testing protocols
Shell Construction	Advanced UHMWPE / aramid composite or equivalent
Shell Profile	PASGT-style extended side and rear coverage
Suspension System	Adjustable impact-absorbing internal suspension
Retention System	Adjustable four-point chin strap
Interior Padding	Replaceable shock-absorbing comfort pads
Exterior Finish	Anti-reflective, abrasion-resistant coating
Available Colours	Olive Drab, Black, Tan, and Camouflage
Available Sizes	Medium, Large and Extra Large

PASGT BALLISTIC HELMET & BODY ARMOUR VEST

PASGT TACTICAL BALLISTIC VEST

The Buckler Land Systems PASGT Tactical Ballistic Vest is designed to deliver comprehensive upper-body protection for military, law enforcement and security personnel.

The proposed configuration combines a flexible protective vest with integrated rifle-rated hard armour plates, providing enhanced protection against designated 5.56 mm and 7.62 mm rifle threats.



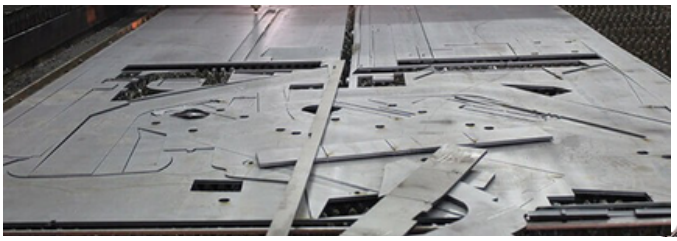
Technical Specifications

Parameter	Proposed Specification
Product Type	PASGT-Style Tactical Ballistic Vest
Ballistic Protection	Rifle-rated hard armour plate configuration
Target Protection Rating	NIJ RF2 or RF3, depending on selected configuration
Rifle Threats	Specified 5.56 × 45 mm, 7.62 × 39 mm, and 7.62 × 51 mm ammunition
Soft Armour Material	Multi-layer aramid or UHMWPE ballistic composite
Hard Armour Material	Ceramic-composite / UHMWPE or equivalent
Plate Configuration	Front and rear; optional side protection
Plate Dimensions	250 × 300 mm nominal, with alternative sizes available
Outer Carrier	Heavy-duty abrasion-resistant tactical fabric
Attachment System	MOLLE/PALS-compatible webbing
Adjustment System	Adjustable shoulder and waist retention
Interior Construction	Breathable lining and comfort padding
Available Colours	Olive Drab, Black, Tan, and Camouflage
Available Sizes	Medium, Large, Extra Large, and custom fit

CRITICAL COMPONENTS

1. BALLISTIC STEEL (OPAQUE ARMOUR)

High hardness steel rich in Carbon, otherwise known as Ballistic steel is the first layer of protection between projectile threats and the passengers. During the armouring process, various patterns fitting the shape of different areas of the vehicle are made using Computer Aided Design and through the use of a CNC Fibre Laser machine, the Ballistic steel is cut into these patterns that are then welded to the vehicle's interior to form a 360 bullet resistant fortress. Buckler Land Systems through its technical partnership and patronage of SSAB Sweden provides her clientele with 360 degree protection matching their operational threat level.





2. BULLET RESISTANT GLASS (TRANSPARENT ARMOUR)

Bullet-Resistant Glass — also called ballistic glass, bulletproof glass (informally), or transparent armour — is a specially engineered material designed to withstand ballistic impacts from firearms, shrapnel, and other projectiles while allowing clear visibility.

Bullet-resistant glass is not truly "bulletproof"; instead, it is bullet-resistant, meaning it can absorb and disperse the energy of a projectile to prevent penetration for a certain number of shots, calibre, and velocity as defined by its protection rating.

It typically consists of multiple layers of glass and polycarbonate bonded together under heat and pressure.

When a bullet strikes:

- The outer glass layers flatten and slow the projectile.
- The inner polycarbonate layers absorb remaining energy and prevent spalling (glass fragments flying inward).
- The layers work together to keep the projectile from passing through.



CRITICAL COMPONENTS

3. RUNFLAT INSERTS

Run-flat tyre inserts are specialised devices fitted inside the tyres of armoured vehicles to allow them to continue moving for about 60km even after a tyre has been punctured, shot, or completely deflated. They are a critical survival feature in security, military, and VIP protection vehicles, where stopping after tyre damage could be life-threatening. A high-strength insert is fitted inside the tyre, mounted onto the wheel rim and when the tyre loses pressure, the vehicle's weight rests on the insert. The insert supports the vehicle and allows continued driving at reduced speed until reaching safety.

In an ambush or hostile environment, tyre punctures are often used to immobilize a vehicle.

Our runflat inserts allows your armoured vehicle maintain mobility after:

- Gunfire penetration
- Nail strips or spike attacks
- Shrapnel damage from explosives
- Blowouts from rough terrain or high-speed impacts



4. HEAVY DUTY SUSPENSION SYSTEM

Heavy-duty suspensions are reinforced suspension systems designed to handle the increased weight and altered dynamics of armoured vehicles. Armouring (steel, composite panels, ballistic glass, run-flat tyres) can add 1,000–2,000+ kg to a standard vehicle, which standard factory suspension is not engineered to support.

The purpose of Heavy-Duty Suspension in Armoured Vehicles is:

- Weight Compensation: Maintain proper ride height and stability despite added mass.
- Performance Preservation: Ensure acceleration, braking, and cornering remain safe and predictable.
- Durability: Prevent premature wear of suspension components under constant heavy loads.
- Ride Comfort: Preserve passenger comfort despite thicker armour, run-flats, and reinforced structure.
- Off-Road Capability: Maintain or improve off-road handling for tactical, military, or convoy operations.



CRITICAL COMPONENTS

5. HEAVY DUTY BRAKING SYSTEM

A heavy-duty braking system is an essential upgrade for armoured vehicles, which typically weigh 30-80% more than their stock versions due to ballistic steel, composite armour, bullet-resistant glass, run-flat tyres, and reinforced chassis components. The added mass increases stopping distances and heat buildup, making enhanced brakes critical for both safety and performance.

Heavy-Duty Braking system is a critical component to be installed during armoured vehicle production because;

- Shorter Stopping Distances: Offset the extra weight of armour and equipment.
- Heat Resistance: Prevent brake fade during repeated stops or emergency manoeuvres.
- Durability: Withstand constant operation at higher Gross Vehicle Weight (GVW).
- Safety Under Load: Maintain braking efficiency even when the vehicle is fully loaded with crew, cargo, or cash.



6. HEAVY DUTY MACHINED DOOR HINGES

In an armoured vehicle, door weight can increase by 200-400% compared to a standard vehicle due to ballistic steel plating, multi-layer bullet-resistant glass, overlap armour systems, and blast seals. This weight places immense stress on the hinges, which is why heavy-duty machined door hinges are a critical engineering upgrade.

Heavy-Duty Machined door hinges serves the following purpose:

- Support Additional Weight: Prevent sagging or misalignment of armoured doors.
- Smooth Operation: Allow heavy doors to open/close without excessive force.
- Durability: Withstand years of repeated use in extreme environments.
- Safety: Ensure doors remain functional after impacts, blasts, or ballistic events.



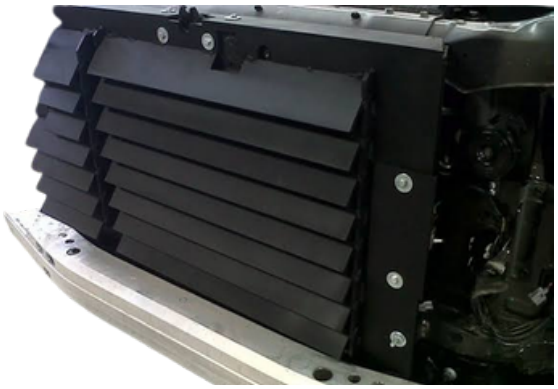
CRITICAL COMPONENTS

7. RADIATOR PROTECTION GRILLE

In an ambush or attack, one of the quickest ways to immobilise a vehicle without penetrating its armour is to disable the radiator. A damaged radiator causes coolant loss, leading to overheating and eventual engine failure. For this reason, radiator protection is a key part of armoured vehicle engineering, especially for VPAM 7-certified vehicles used in high-threat zones.

The primary purpose of the Radiator protection Grille is to;

- Prevent Immediate Disabling Shots: Stops bullets, shrapnel, or debris from piercing the radiator core.
- Maintain Engine Cooling: Keeps the cooling system functional during and after hostile engagements.
- Increase Mission Survivability: Ensures the vehicle can keep moving long enough to exit danger.
- Protect Other Front-End Components: Also shields intercoolers, condensers, and front-mounted electronics.



8. FUEL TANK PROTECTION

In armoured vehicles — such as VPAM 7-certified SUVs, sedans, and cash-in-transit trucks — fuel tank protection is a critical safety measure. .

Protecting a Armoured Vehicle's fuel tank is critical for the following reasons;

- Prevent Penetration: Stop bullets, shrapnel, or debris from breaching the fuel tank.
- Prevent Leaks: Reduce risk of fuel loss and environmental contamination.
- Reduce Fire & Explosion Risk: Minimise chances of ignition from sparks, hot metal, or tracer rounds.
- Maintain Mobility: Keep the vehicle running long enough to exit a danger zone.



OPTIONAL ADD-ON COMPONENTS

9. AUTOMATIC FIRE SUPPRESSION SYSTEM

An Automatic Fire Suppression System (AFSS) is a self-activating safety system installed in armoured vehicles to detect and extinguish fires within seconds, without requiring driver or crew intervention. It is an optional component in VPAM 7 civilian armoured vehicles, cash-in-transit trucks, and military tactical platforms, where fire can result from ballistic impact, engine failure, electrical faults, or explosive threats.

It provides the means for immediate Response in the event of a fire before it can spread and cause catastrophic damage.



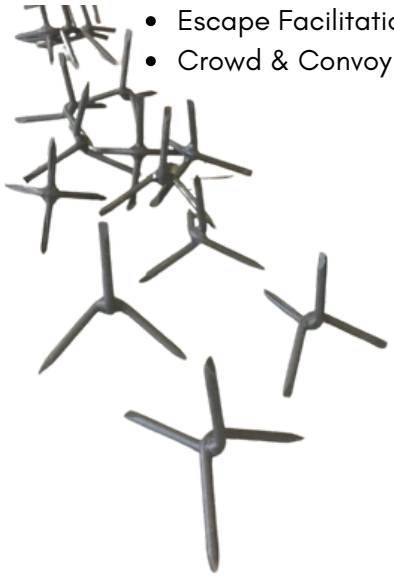
10. AUTOMATIC SPIKE DISPENSING SYSTEM

An Automatic Spike Dispensing System (ASDS) is a concealed, vehicle-mounted mechanism that deploys tyre-deflating spikes behind or ahead of a moving or stationary vehicle. It is primarily used in law enforcement, military, and armoured convoy applications to disable pursuing or intercepting vehicles during high-threat scenarios.

In armoured vehicles, especially those used for VIP protection, cash-in-transit, and tactical operations — the ASDS acts as a non-lethal countermeasure to prevent hostile vehicles from closing in.

ASDS can serve the following purpose;

- Hostile Vehicle Neutralisation: Stop or slow down pursuing threats.
- Perimeter Defence: Block vehicle approach to secure locations.
- Escape Facilitation: Create a gap between the protected vehicle and the threat during retreat.
- Crowd & Convoy Control: Manage vehicle flow in tactical situations.



OPTIONAL ADD-ON COMPONENTS

11. TWO-WAY INTERCOM SYSTEM

An armoured vehicle two-way intercom system is a hands-free, secure communication device that allows passengers inside the armoured capsule to speak with individuals outside the vehicle without opening doors or windows.

This can be an important feature for VIP transport, cash-in-transit (CIT) operations, military vehicles, and diplomatic fleets, where opening a window could compromise ballistic protection.

The Two-way Intercommunication system promotes;

- Maintain Security: Enables communication without breaking the armoured seal.
- Operational Efficiency: Supports instructions, identification checks, and negotiations.
- Safety Under Threat: Prevents exposure to ballistic or chemical threats from outside.
- Convenience: Allows normal interaction at gates, checkpoints, or tolls.



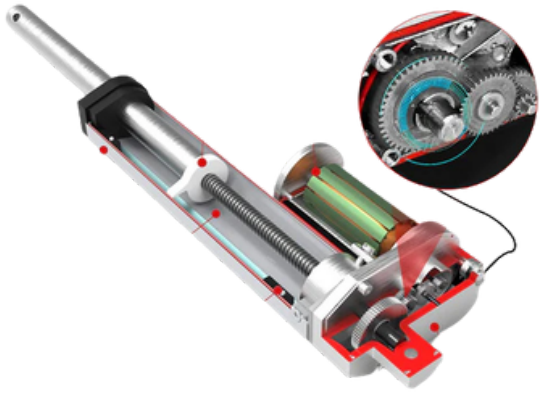
12. BULLET RESISTANT GLASS ACTUATORS

In civilian armoured vehicles (CAVs), bullet-resistant glass actuators are specially engineered mechanisms that raise and lower multi-layer ballistic glass — often 40-80 mm thick — while ensuring smooth, reliable operation.

These actuators are optional but important in VPAM 7 and similar high-protection vehicles, where window weight and resistance levels are several times greater than in standard cars.

Heavy-Duty Actuators provide the folliowing function;

- Lift Heavy Ballistic Glass: Standard automotive window regulators cannot handle the weight of armoured glazing.
- Ensure Reliability: Maintain smooth and consistent movement despite increased load.
- Preserve Functionality: Allow partial or full window opening for operational needs while keeping ballistic integrity.
- Enhance Safety: Prevent glass from dropping or jamming during emergencies.



OPTIONAL ADD-ON COMPONENTS

13. MOBILE SIGNAL BOOSTER

In civilian armoured vehicles (CAVs) — such as VIP transport SUVs, diplomatic sedans, and cash-in-transit (CIT) trucks and, Military Armoured Vehicles — a mobile signal booster ensures strong, reliable mobile network connectivity in areas with weak coverage or signal interference.

Because the ballistic steel and multi-layer bullet-resistant glass used in armoured vehicles significantly reduce signal strength, boosters are often installed as part of the vehicle's communications suite.

Mobile Signal boosters serves the purpose to;

- Overcome Armour Interference: Maintain clear mobile calls and data connectivity despite signal-blocking armoured materials.
- Enhance Operational Communication: Ensure security teams remain in contact with control centres or escorts.
- Improve GPS & App Performance: Stronger mobile data improves navigation, tracking, and security applications.
- Emergency Readiness: Maintain reliable contact during security incidents in remote or urban dead zones.



14. MOTOROLA MOTOTRBO DM4600E DIGITAL MOBILE RADIO

The Motorola MOTOTRBO™ DM4600e is a high-performance digital mobile two-way radio designed for secure, reliable, and instant communication — making it an ideal fit for armoured vehicles. Its encryption capabilities, long-range coverage, and integration flexibility make it a vital tool for convoy coordination, security escorts, and operational command.

Why the DM4600e is Ideal for Armoured Vehicles?

- Overcomes Cellular Limitations: Functions independently of mobile networks, avoiding signal loss in rural areas or during network outages.
- Encrypted Communication: Ensures sensitive conversations remain private and protected from interception.
- Long-Range Performance: 25-45 watts of transmit power ensures strong, clear communication over extended distances — essential for convoy operations.
- Rugged Reliability: Designed to withstand vibration, dust, and temperature extremes common in armoured deployments.



OPTIONAL ADD-ON COMPONENTS

15. LED STROBE LIGHT

In armoured vehicles — especially those used in VIP escort duties, diplomatic movements, and cash-in-transit (CIT) operations — red and blue strobe lights serve as emergency warning and priority signalling systems. When activated, these lights signal to surrounding traffic and pedestrians that the vehicle is operating in a high-priority, security-sensitive mode, often requiring a clear path.

Strobe Lights serve the following purpose;

- Visual Identification: Alerts other road users that the vehicle is part of a protected convoy or security operation.
- Traffic Clearing: Encourages surrounding vehicles to yield or give way.
- Security Deterrence: Visibly communicates an official or high-security presence, discouraging interference.
- Convoy Coordination: Allows escort and lead vehicles to easily identify each other in traffic.



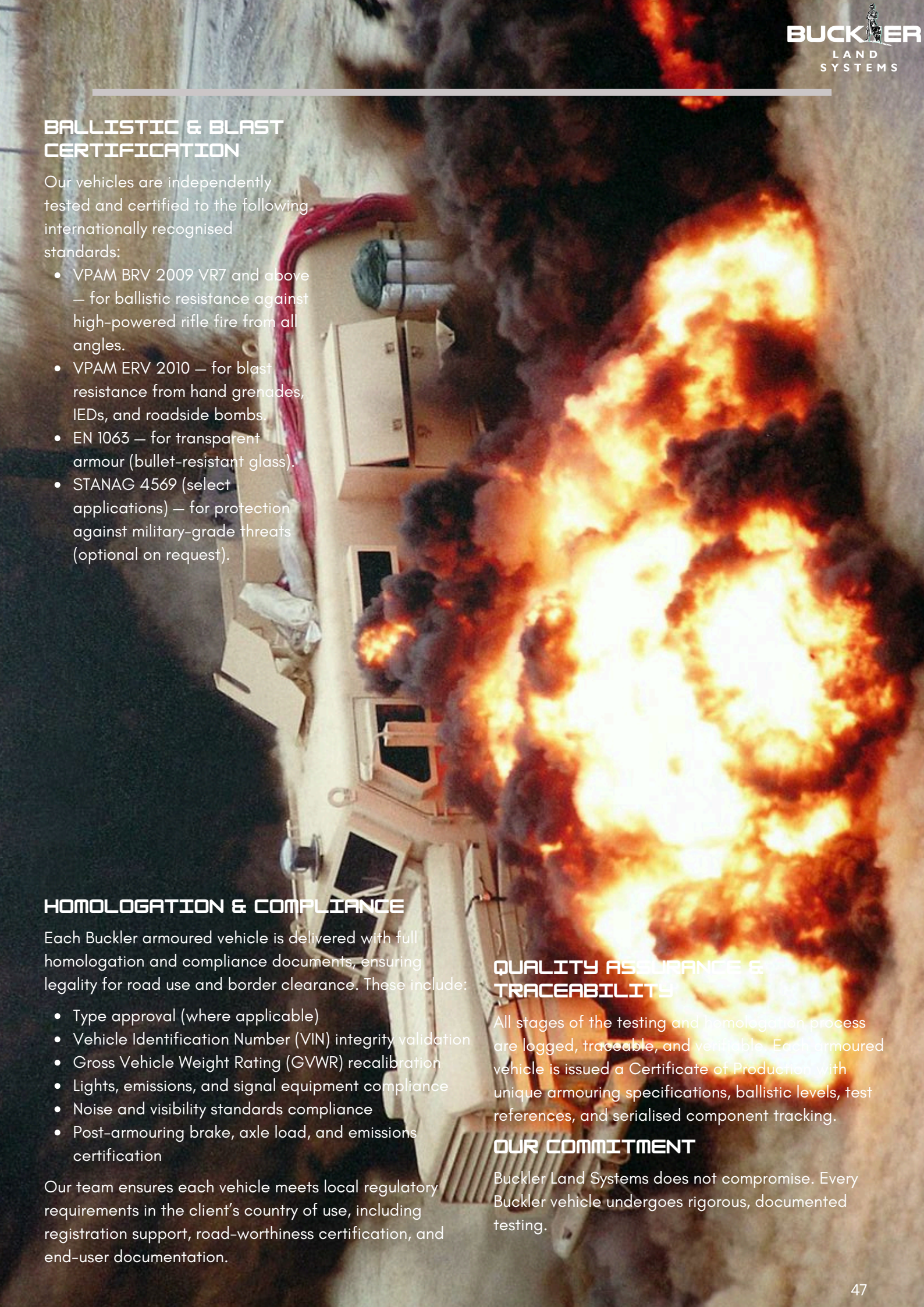
16. PUBLIC ADDRESS SYSTEM AND SIREN

A Public Address System (PA) combined with a siren is a standard feature in many armoured vehicles used for VIP protection, diplomatic transport, and cash-in-transit (CIT) duties.
It allows the occupants — typically the driver or security personnel — to communicate with people outside the vehicle and signal priority movement without compromising ballistic protection by opening windows or doors.

PA/SIREN Systems are useful for;

- External Communication: Issue instructions, warnings, or alerts to pedestrians, security personnel, or other drivers.
- Traffic Clearing: Siren alerts surrounding vehicles to give way for priority movement.
- Crowd Control: Manage people around the vehicle in congested or high-threat situations.
- Security Deterrence: Demonstrate an official or high-security presence to discourage interference.





BALLISTIC & BLAST CERTIFICATION

Our vehicles are independently tested and certified to the following internationally recognised standards:

- VPAM BRV 2009 VR7 and above – for ballistic resistance against high-powered rifle fire from all angles.
- VPAM ERV 2010 – for blast resistance from hand grenades, IEDs, and roadside bombs.
- EN 1063 – for transparent armour (bullet-resistant glass).
- STANAG 4569 (select applications) – for protection against military-grade threats (optional on request).

HOMOLOGATION & COMPLIANCE

Each Buckler armoured vehicle is delivered with full homologation and compliance documents, ensuring legality for road use and border clearance. These include:

- Type approval (where applicable)
- Vehicle Identification Number (VIN) integrity validation
- Gross Vehicle Weight Rating (GVWR) recalibration
- Lights, emissions, and signal equipment compliance
- Noise and visibility standards compliance
- Post-armouring brake, axle load, and emissions certification

Our team ensures each vehicle meets local regulatory requirements in the client's country of use, including registration support, road-worthiness certification, and end-user documentation.

QUALITY ASSURANCE & TRACEABILITY

All stages of the testing and homologation process are logged, traceable, and verifiable. Each armoured vehicle is issued a Certificate of Production with unique armouring specifications, ballistic levels, test references, and serialised component tracking.

OUR COMMITMENT

Buckler Land Systems does not compromise. Every Buckler vehicle undergoes rigorous, documented testing.

ARMOURED VEHICLE OPERATIONS COURSE (AVOC)

The Armoured Vehicle Operations Course by Buckler Land Systems is designed to equip drivers, security personnel, and executive protection teams with the specialised skills required to operate armoured vehicles (AVs) effectively in both low-risk and high-threat environments.

Modern armoured vehicles — especially those certified to VPAM, NIJ, or EN standards — demand unique handling skills, system familiarity, and tactical awareness. This course combines technical classroom instruction, hands-on driving drills, and real-world threat simulation to prepare operators for the demands of secure transportation.

COURSE OBJECTIVES

- Teach safe and efficient operation of armoured vehicles under varied conditions.
- Provide in-depth knowledge of armoured vehicle systems and protection features.
- Train drivers in evasive and defensive driving to counter security threats.
- Develop route planning, convoy coordination, and communication skills.
- Enhance readiness for emergency scenarios, including vehicle disablement and ambush response.

WHO SHOULD ATTEND

- Corporate and private security drivers.
- Executive protection (EP) specialists.
- Diplomatic fleet chauffeurs.
- Cash-in-Transit (CIT) vehicle operators.
- NGO and high-risk area drivers.

CORE TRAINING MODULES

1. Introduction to Armoured Vehicles

- Categories of armoured vehicles (SUVs, sedans, vans, CIT trucks).
- Ballistic protection levels (VPAM BRV 2009 VR, NIJ, EN 1063).
- Overview of armour materials: ballistic steel, composites, and bullet-resistant glass.

2. Vehicle Systems Familiarisation

- Heavy-duty suspensions, reinforced brakes, and run-flat tyres.
- Communication systems: two-way radios, intercoms, and signal boosters.
- Security features: fire suppression, self-sealing fuel tanks, radiator and underbody protection.

3. Handling & Driving Dynamics

- Understanding weight distribution and impact on acceleration and braking.
- Low-speed precision driving and tight-space manoeuvring.
- Off-road considerations for armoured SUVs and pickups.

4. Defensive & Evasive Driving

- Threat identification and decision-making.
- High-speed lane changes and emergency braking.
- J-turns, Y-turns, and reverse escape techniques.
- Convoy coordination and movement discipline.

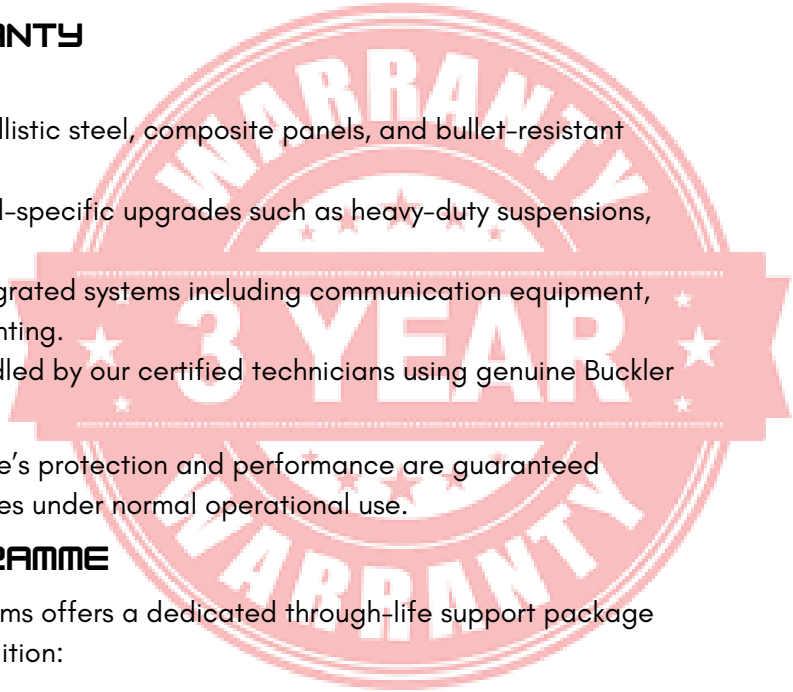
5. Threat Response & Emergency Scenarios

- Ambush reaction drills.
- Securing VIPs during vehicle disablement.
- Communication protocols under attack.

WARRANTY & THROUGH-LIFE SUPPORT

At Buckler Land Systems, we understand that owning and operating carmoured vehicles is a significant investment in safety and security. That's why we back every vehicle we deliver with a comprehensive 3-year warranty and an extensive through-life support programme — ensuring your armoured vehicle remains reliable, effective, and mission-ready throughout its service life.

1. 3-YEAR COMPREHENSIVE WARRANTY



Our industry-leading warranty covers:

- Armour Integrity: Protection against defects in ballistic steel, composite panels, and bullet-resistant glass.
- Mechanical Components: Coverage for armoured-specific upgrades such as heavy-duty suspensions, brakes, and run-flat tyres.
- Electrical and Security Systems: Warranty on integrated systems including communication equipment, fire suppression, automatic spike systems, and lighting.
- Labour and Parts: Repairs and replacements handled by our certified technicians using genuine Buckler Land Systems parts.

This warranty provides peace of mind that your vehicle's protection and performance are guaranteed against manufacturing defects and workmanship issues under normal operational use.

2. THROUGH-LIFE SUPPORT PROGRAMME

Beyond the initial warranty period, Buckler Land Systems offers a dedicated through-life support package designed to keep your armoured vehicle in peak condition:

a) Scheduled Maintenance & Inspections

- Routine checks tailored specifically for armoured vehicles, including armour integrity, mechanical wear, and system diagnostics.
- Preventative maintenance plans to minimise unexpected downtime and costly repairs.

b) Repairs and Upgrades

- Access to our network of authorised service centres staffed by technicians trained in armoured vehicle technologies.
- Options for system upgrades, such as improved ballistic materials, enhanced communication suites, or countermeasure additions as threats evolve.

c) Emergency Support & Rapid Response

- Priority technical support for urgent repairs or vehicle issues impacting operational readiness.
- Mobile service teams capable of on-site repairs in key regions, reducing vehicle downtime.

d) Training & Documentation

- Refresher courses for operators and maintenance staff to ensure correct vehicle use and care.
- Detailed maintenance manuals and operational guides specific to your armoured vehicle configuration.

3. WHY CHOOSE BUCKLER LAND SYSTEMS SUPPORT?

- Expertise: Decades of experience in armoured vehicle manufacturing and field service.
- Quality Assurance: Certified workmanship and genuine parts ensure safety and longevity.
- Customer-Centric: Tailored support programmes designed around your operational needs.
- Global Reach: Support available internationally to keep your fleet mission-ready wherever deployed.

With Buckler Land Systems, your civilian armoured vehicle investment is safeguarded not just at delivery but throughout its entire lifecycle — empowering you to operate confidently in any environment.

AFTERSALES SUPPORT

At Buckler Land Systems, our commitment to clients extends far beyond the delivery of their civilian armoured vehicle. We understand that the continued reliability, safety, and performance of your vehicle depend on expert aftersales care and readily available spare parts.

COMPREHENSIVE AFTERSALES SUPPORT

Our aftersales program is designed to ensure that every Buckler armoured vehicle remains in optimal condition throughout its service life. We provide:

- Scheduled Maintenance Services – Regular inspections, servicing, and preventative maintenance to keep your vehicle operating at peak performance.
- Repair & Refurbishment – Expert technicians trained in armoured vehicle systems to restore ballistic integrity, replace worn components, and conduct upgrades when required.
- On-Site & Remote Support – Assistance wherever you are, with the ability to dispatch mobile technicians or provide guided support remotely.
- Technical Training – Driver and mechanic training on operating and maintaining armoured vehicles to manufacturer specifications.

GENUINE SPARE PARTS SUPPLY

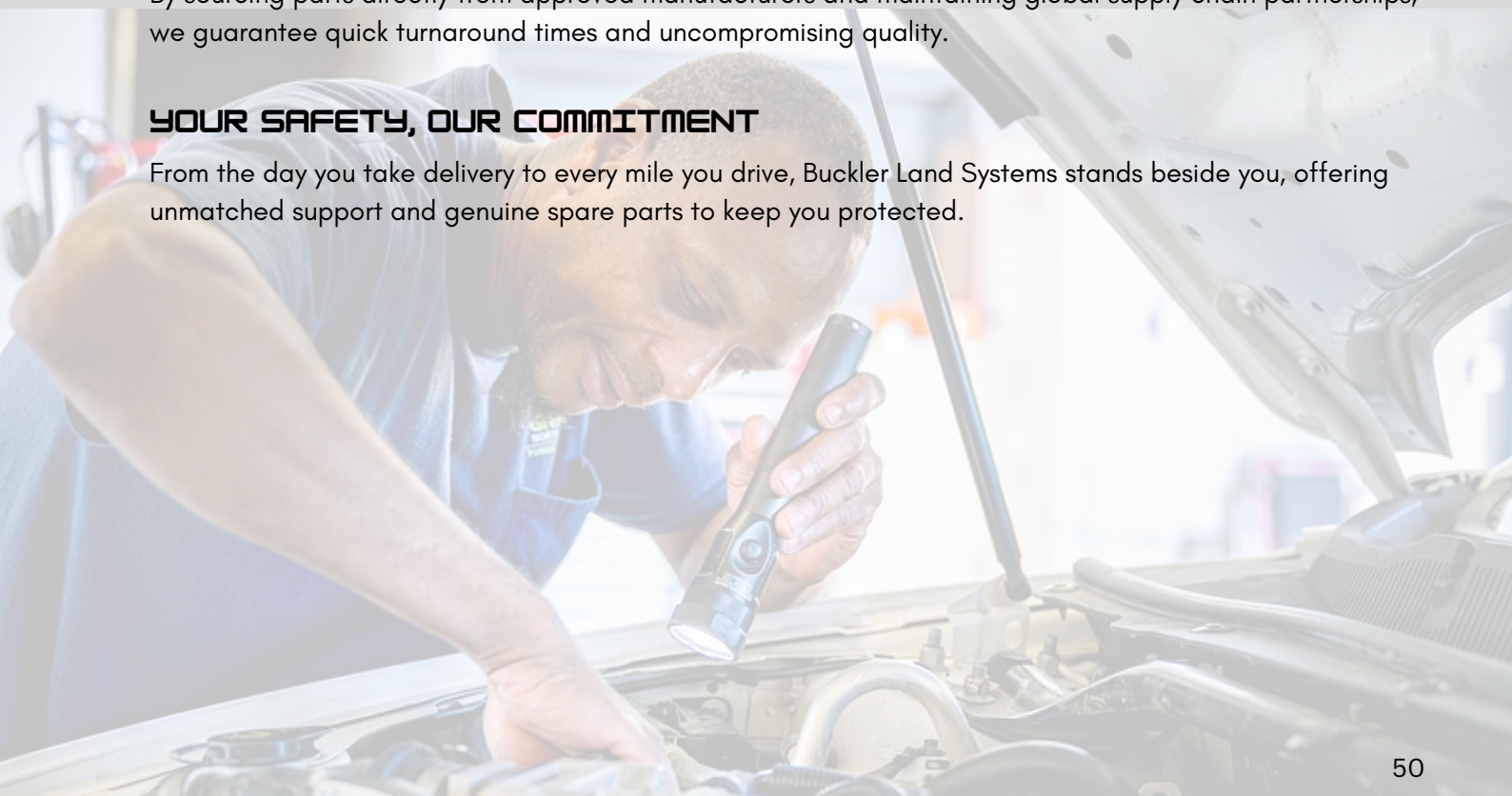
Buckler Land Systems maintains a robust inventory of genuine spare parts specifically engineered for armoured vehicles, ensuring that replacements meet original ballistic and mechanical standards. Our parts offering includes:

- Armouring Components – Ballistic glass, armoured steel panels, blast floors, and run-flat systems.
- Mechanical & Electrical Parts – OEM-grade suspension, braking, engine, and drivetrain components tailored to the weight and configuration of armoured vehicles.
- Specialised Accessories – Sirens, public address systems, intercoms, and tactical lighting.

By sourcing parts directly from approved manufacturers and maintaining global supply chain partnerships, we guarantee quick turnaround times and uncompromising quality.

YOUR SAFETY, OUR COMMITMENT

From the day you take delivery to every mile you drive, Buckler Land Systems stands beside you, offering unmatched support and genuine spare parts to keep you protected.



DOCUMENTATION

At Buckler Land Systems, we recognize that the procurement and operation of armoured vehicles involve complex regulatory and compliance requirements. To support our clients fully, we provide comprehensive and accurate documentation which is a prerequisite for the use of Armoured Vehicles in most countries.

Some of the documentation we provide to our clients include:

1. IMPORT CUSTOMS DOCUMENTS

- Complete and compliant import paperwork tailored to the destination country's customs regulations.
- Customs declarations, clearance forms, and tax documentation

2. END USER CERTIFICATES (EUC)

- Provision of official End User Certificates specifying the final recipient of the armoured vehicle, ensuring transparency and adherence to international arms control and export regulations.
- Documentation verifying that vehicles will be used strictly by the declared end user for the declared purpose.
- Support in the preparation and submission of EUCs required by both exporting and importing governments

3. MINISTRY OF FOREIGN AFFAIRS (MOFA) DOCUMENTS

- Facilitation of MOFA endorsements and approvals, which are often mandatory for the export and import of armoured vehicles.
- Liaison with government bodies to ensure all diplomatic clearances, export permits, and transit approvals are secured on time.
- Preparation of supporting documentation to satisfy bilateral and multilateral trade agreements.

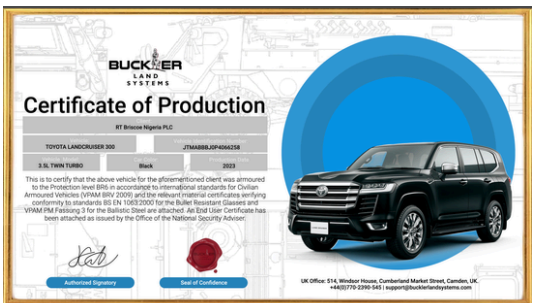
4. BALLISTIC TEST CERTIFICATES

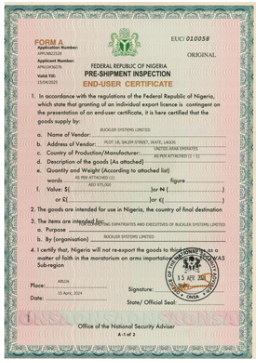
- Issuance of detailed ballistic protection certificates confirming that vehicles meet internationally recognised standards such as VPAM, NIJ, or EN 1063.
- Certificates specify the exact level of ballistic protection provided by the armoured panels, glass, and components.
- Third-party ballistic testing reports (where applicable) are included to verify compliance and assure clients of vehicle safety.

5. CERTIFICATE OF PRODUCTION

- Official Certificate of Production verifying the manufacturing origin, date, and production details of each armoured vehicle.
- Includes information on vehicle model, armouring specifications, and quality assurance checks.
- Serves as a critical document for registration, warranty claims, and future resale.

Our commitment to precise and comprehensive documentation guarantees that your civilian armoured vehicle acquisition is transparent, legal, and hassle-free — allowing you to focus on operational readiness and security.









SUSTAINABILITY

Our Commitment

At Buckler Land Systems, protection and responsibility go hand-in-hand. Through our partnership with **Solar Silo**, we're decarbonising how we design and build civilian armoured vehicles (CAVs) by expanding on-site renewables, electrifying plant equipment, and auditing our supply chain for lower-carbon materials—without compromising safety, certification, or performance.

2025 Renewable Energy Highlight

13,000 kWh of clean electricity will be generated on-site in 2025.
What that means (approximate equivalents):

- Power for ~100 typical Nigerian homes for a year (based on ~130kWh/home).
- ~2.6–4.0 tonnes CO_2e avoided versus average grid electricity,* or up to ~9.4 tonnes CO_2e versus diesel generator use.

* Actual avoidance depends on local grid intensity.
** Where renewables displace diesel backup.

HOW WE'RE MAKING CAV PRODUCTION GREENER

Clean Power & Smart Energy

- Rooftop solar PV with smart inverters; export metering and automated fault diagnostics.
- Battery energy storage to shave peaks, protect processes during outages, and charge off-peak.
- High-efficiency HVAC & heat-recovery in welding, glazing, and paint areas.
- LED task lighting across fabrication, inspection, and QA bays.

Materials & Processes

- Responsible steel sourcing (EAF/recycled-content where available) and closed-loop scrap recovery.
- Low-VOC adhesives and coatings; solvent capture & recycling in finishing.
- Water efficiency: closed-loop cooling circuits and rinse-water filtration.
- Consumables rationalisation to reduce waste from abrasives, packaging, and PPE.

Equipment Electrification

- Electric forklifts & pallet movers; idle-reduction policies for plant and gensets.
- Compressed-air leak audits and variable-speed compressors to cut parasitic loads.

Vehicles with Lower Whole-Life Impact

- Optimised curb weight (finite-element design, mixed-material armour) to maintain protection while improving fuel efficiency.
- Run-flat, brake, and suspension selections tuned for durability—fewer replacements over the life of the vehicle.
- End-of-life plan: take-back of armour modules and ballistic glass for specialist recycling where feasible.

Governance, Standards & Transparency

- ISO 9001 (quality) and ISO 14001 (environmental) aligned management systems.
- Scope 1–3 accounting with annual targets for energy intensity (kWh/vehicle), waste diversion, and VOC reductions.
- Supplier Code of Conduct embedding ESG criteria into steel, glass, and components sourcing.
- Ballistic & vehicle certifications (VPAM/EN/ERV) unaffected—sustainability is additive, never a trade-off.

2026–2028 Roadmap

- ⩾25,000 kWh/year on-site renewables by 2028 (subject to roof expansion and storage).
- 50% reduction in operational VOC emissions versus 2023 baseline.
- ⩾90% waste diversion from landfill in production areas.
- Green logistics pilots with consolidated shipping and alternative fuels for regional moves.

Why It Matters

Every kilowatt-hour we generate and every kilogram of material we save makes our vehicles—and your operations—more resilient. With Buckler, security and sustainability are designed together from day one.

MULTIMEDIA GALLERY



YouTube

SCAN ME

PARTNERS

MANUFACTURERS ASSOCIATION OF NIGERIA

HUTCHINSON

STOPTECH HIGH PERFORMANCE BRAKE SYSTEMS

NADDC NATIONAL AUTOMOTIVE DESIGN AND DEVELOPMENT COUNCIL

SSAB

Dobinsons SPRING & SUSPENSION

EG الامارات للزجاج EMIRATES GLASS

STANDARDS ORGANISATION OF NIGERIA SON

ASSOCIATION OF THE UNITED STATES ARMY

ASC ASSOCIATION OF SECURITY CONSULTANTS

DEFENCE INDUSTRIES CORPORATION OF NIGERIA

Solar Silo

mit Sicherheit VPAM

NIGERIAN ARMY

FEDERAL MINISTRY OF INDUSTRY, TRADE & INVESTMENT

DIAN DEFENCE INDUSTRY ASSOCIATION OF NIGERIA *Projecting Defence Industry*

OFFICE OF THE NATIONAL SECURITY ADVISER ONSA FEDERAL REPUBLIC OF NIGERIA

CLIENTELE


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GLOBE MOTORS

AUTO SECURITY FILM

We understand getting an armoured vehicle can be a big investment and might take sometime to reach a decision to procure one. However, protection remains critical and we care. This is why we have partnered with LLUMAR as the exclusive distributor and installer of LLumar Automotive Security Films in Nigeria.

LLumar Automotive Security Film is a premium, multi-layer polyester window film engineered to enhance vehicle safety, deter break-ins, and improve occupant protection. Designed for both civilian armoured vehicles (CAVs) and high-value personal cars, LLumar security film provides a strong, invisible barrier that reinforces glass without compromising clarity or style.

KEY BENEFITS

1. Enhanced Security & Break-In Resistance
   - Holds shattered glass together, slowing or deterring smash-and-grab attacks.
   - Increases the time required for forced entry, giving drivers and passengers critical seconds to react.
2. Safety in Accidents
   - Reduces the risk of injury from flying glass fragments during collisions.
   - Prevents loose shards from scattering into the cabin.
3. Discreet Appearance
   - Available in clear or tinted options to match vehicle style.
   - Maintains OEM-like transparency with no distortion or hazing.
4. UV Protection
   - Blocks 99% of harmful UVA/UVB rays, protecting occupants and preserving interiors.
5. Heat & Glare Reduction(with tinted variants)
   - Improves cabin comfort by rejecting solar heat.
   - Reduces glare for better visibility and driving comfort.

TECHNICAL FEATURES

- Construction: Multi-ply polyester layers with scratch-resistant hard coat.
- Thickness Options: 4 mil, 7 mil, 8 mil, and higher for security applications.
- Adhesion: Pressure-sensitive mounting adhesive for permanent bond.
- Impact Performance: Resists blunt force, repeated strikes, and high-velocity impacts.
- Certifications: Meets or exceeds ANSI Z97.1, CPSC 16 CFR 1201, and various automotive glazing safety standards.

WARRANTY & QUALITY ASSURANCE

- Backed by LLumar's limited manufacturer warranty against peeling, bubbling, and discolouration.
- Installed by certified technicians to ensure performance and longevity.

SUMMARY

LLumar Automotive Security Film is more than just tint — it's an invisible shield for your vehicle's glass, combining security, safety, comfort, and style in one advanced product.

PRODUCT/SERVICE ENQUIRY

FOR
VEHICLE ARMOURING



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FOR
LLUMAR AUTOMOTIVE
SECURITY FILM

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