TMSI Tactical Mobility Solutions International

TAC-6 MK II GDAMS

Highly Mobile. Lightly Armoured. Heavily Armed.

TMSI Tactical Mobility Solutions International

THE BATTLEFIELD HAS CHANGED. ADAPT YOUR MOBILITY!

The conflict in Ukraine have confirmed what the Middle East have long shown, the modern battle space is drone-saturated, and deeply hostile to large, slow, high-signature platforms. Armoured columns once considered dominant have been destroyed by persistent aerial surveillance, loitering munitions, and precision-guided systems at range.

The force that moves quickly, disperses rapidly, reduces its signature, and delivers accurate organic fires without waiting for higher echelon support holds the decisive advantage. The limiting factor is no longer firepower – it is the kill chain.

Static positions, mortar lines, command posts, and heavy vehicles have a life expectancy measured in minutes once a drone observes them. Mobility, precision, and the shortest possible kill chain are now decisive attributes.

THE LIMITING FACTOR IS NO LONGER FIREPOWER.IT IS THE KILL CHAIN.

MOBILITY

- Position fast.
- Operate independently.
- C-130, C-390 and CH-47 deployable.
- 140 km/h road speed.

ARMAMENTS

- 120mm indirect fire capability.
- Responsive to the Battery commander.

SURVIVABILITY

- Shoot and scoot. Move before counter-battery can respond.
- Low observable signature.

TAC-6 MK II GDAMS PLATFORM OVERVIEW

Drive Configuration 6 x 6 Permanent All-Wheel Drive

7,000 kg	140 km/h	1,200+ km
Combat Weight (GVM)	Max Road Speed (governable)	Operational Range (standard fuel)

Payload Capacity	Up to 4,000 kg (mission configuration dependent)
Fording Depth	700 mm without preparation
Air-Deployable	C-130 Hercules. C-390. CH-47

TMSI Tactical Mobility Solutions International

PURPOSE-BUILT FROM FIRST PRINCIPLES.

TMSI-Engineered Chassis • Toyota COTS Componentry

Toyota gives your force a global parts network. TMSI builds the vehicle to survive the mission.

The TAC 6 MK II is engineered from the ground up by TMSI; it is not just a modified Toyota Land Cruiser. While the chassis, body, and structural architecture are entirely custom TMSI designs, the vehicle intentionally retains the Land Cruiser 70 Series power train and components.

This deliberate choice ensures logistics resilience and parts availability across more than 170 countries, guaranteeing a 15–20-year platform lifespan.

VECTOR DYNAMIC HYDRAULIC STABILITY SYSTEM

Active hydraulic platform - replaces conventional suspension .

The VECTOR system continuously monitors and adjusts suspension behaviour across all six wheel stations in real time, maintaining vehicle stability, weapon platform accuracy, and crew effectiveness on terrain that would defeat any conventional suspension architecture.

- **WEAPON PLATFORM LOCK**
- **ADJUSTABLE RIDE HEIGHT**
- **FAIL-SAFE DEFAULT**
- **REAL-TIME STABILISATION**
- **AUTOMATIC LEVELLING**
- **SELF-RECOVERY MODE**

ZF 8HP90
HOW THE POWER REACHES ALL SIX WHEELS

OE-engineered driveline · Torsion split · Electronic locking differentials

ENGINE
Toyota 1GD-FTV. 2.8L Diesel. 172 kW. 620 Nm.

↓

ZF 8HP90 — 8-SPEED AUTOMATIC TRANSMISSION
1,000 Nm input capacity. 11-tonne GCVR. 7.81 ratio spread. Rear axles.
Torque converter lock-up all gears

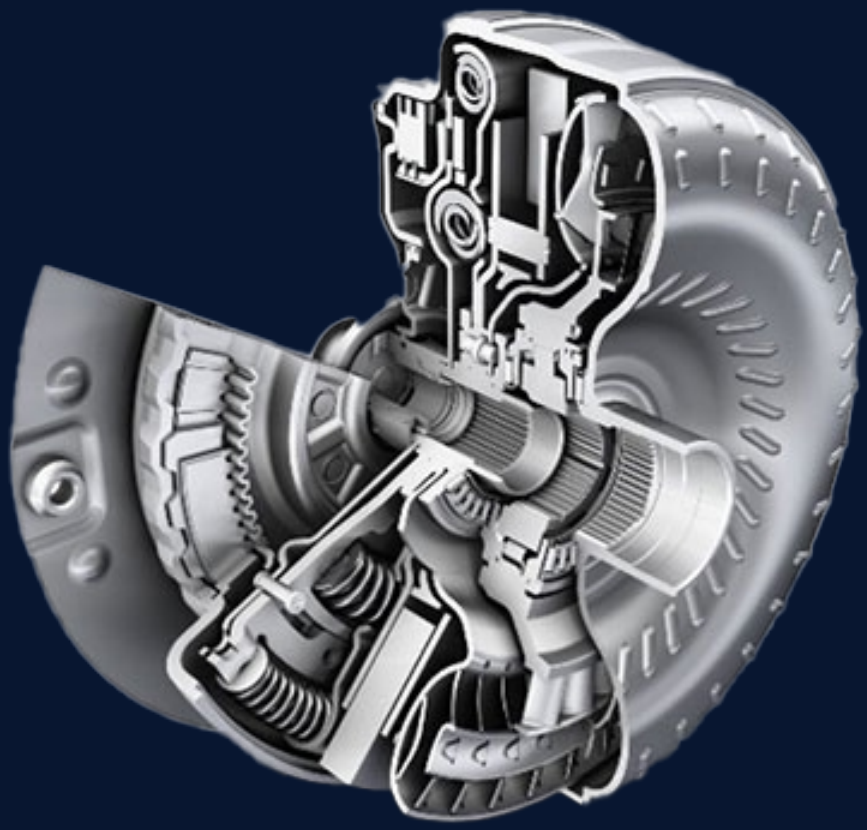
↓

TRANSFER CASE
High / Low range · Distributes drive to front and rear prop shafts

↓ ↓

FRONT AXLE
Electronic locking differentials. x5

MID + REAR AXLES
When locked, equal torque to all six wheels simultaneously. Full 6-wheel drive



ARMOURED CAB

Built to Keep the Crew in the Fight

BALLISTIC PROTECTION & SURVIVABILITY	
Standard Configuration	STANAG 4569 Level 1, protection against small arms fire, fragmentation and blast effects
Up-Armour Option	Appliqué armour system, enhanced STANAG level 2 classification available; contact TMS for details
Armour Material	Armox 620T ballistic plate, high hardness, reduced weight at equivalent protection level
Easily-Repairable Hull	Can be repaired at maintenance depot
Rollover Protection	Internal uni-body structural frame, rollover protection

CREW CONFIGURATION	
Armoured Cab Crew	4 fully equipped crew (double cab) 95th percentile HFE design
GDAMS Operators	Total crew: 2
Climate Control	HVAC full control -32°C to +55°C
Situational Awareness	360-degree camera system. 4 dedicated blackout modes. 12V/24V dual-voltage

THE 6 X 6 FLAT DECK

Rear deck rated for GDAMS, full ammunition load and all supporting systems

REAR DECK SYSTEMS CAPACITY

Fully integrated GDAMS 120mm Mortar System.

Ammunition stowage: 50 rounds of 120mm on a double cab vehicle. 100 rounds on a single cab.

Digital fire control unit, integrated with vehicle GPS/navigation.

Power interface, GDAMS draws from vehicle 12V/24V architecture, no separate generator.

Thermal management for fire control electronics, supplied via vehicle power architecture.

Mortar crew platform, 2 operators with equipment and personal kit.

GDAMS, GROUND DEPLOYED ADVANCED MORTAR SYSTEM

Direct integration onto the TAC-6 MK II rear flat deck
No structural modification required

The GDAMS integrates directly onto the TAC-6 MK II rear deck via hard points engineered into the chassis at design stage, not retrofitted. The mount interfaces with the vehicle's navigation architecture and dual-voltage electrical system, drawing positional data and power directly from the platform. No external generator.

NAVIGATION INTEGRATION

- Vehicle GPS/navigation feeds directly to GDAMS digital fire control.
- Positional data always current.
- No separate survey required.

ELECTRICAL INTERFACE

- System draws from TAC-6 12V/24V architecture.
- No separate generator.
- Thermal management for fire control electronics supplied by vehicle power architecture.

STRUCTURAL MOUNT

- GDAMS mounts to rear deck hard points, purpose-engineered into chassis at design stage.
- Rated to full weapon system load including ammunition stowage.

OPERATION MODES

- Ground deployed operation, Rapid deployment for shoot and scoot purposes.

With a setup time of just 15 seconds from halt to target acquisition, the mortar crew can safely execute a fire solution and stow the GDAMS within 15 seconds of firing the last projectile, dramatically increasing its shoot-and-scoot capability.

GDAMS
SYSTEM CAPABILITY & LOADOUT

120 mm Configuration extended range precision indirect fire.

Maximum Effective Range	9,000 m
Unguided CEP	1.5% PED and 1% PER (conventional round), sufficient for area effect targets.
PM120 GPS-Guided Round	10m CEP
On-Vehicle Ammunition Load	50 rounds of 120 mm (Double-cab), and 100 rounds (Singe-cab), sufficient for multiple complex fire missions
Fire Control	Automated traverse and elevation. Ballistic solution computed automatically upon Target Identification. Automated laying of the gun to the target. Integrated drone spotter for target designation and observation of impact

LEGEND	
CEP	Circular Error Probable
PED	Probable Error in Deflection
PER	Probable Error in Range

ORGANIC UAS

ISR · Target acquisition · Calls for fire · Impact assessment

A UAS with EO/IR sensor and laser designator, operating above the line of sight, provides the GDAMS team with persistent, precise, low-risk target acquisition at ranges that preclude counter-observation. Detection to first round: seconds, not minutes. The GDAMS and the drone are one integrated fire system, not two separate capabilities.

ISR – SCOUT AHEAD

UAS operates ahead of the vehicle axis, identifying threat positions and targets before the TAC-6 enters engagement range. Crew never exposed to counter-observation.

CALLS FOR FIRE

Target coordinates from the UAS transmit directly to the GDAMS digital fire control. Ballistic solution computed automatically. No voice correction. No manual calculation.

PRECISION GUIDANCE

Drone laser designator marks the specific target. GPS-guided 120 mm round impacts exactly where the drone designates. Single round, single effect at 9,000 m.

IMPACT ASSESSMENT & CORRECTION

Drone operator observes round impact, transmits digital fire correction before the crew has reloaded. Dynamic tracking of moving targets. Kill chain: near real time.

The TAC-6/GDAMS executes the fire mission and displaces immediately. The drone observes the impact. The vehicle is already moving. The enemy counter-battery solution is negated.

TMSI Range of Vehicles

Common Toyota OEM components, parts and service network

TMSI designs and manufactures a family of light tactical vehicles derived from a common chassis architecture. Each platform is optimised for a specific operational role while sharing a common Toyota OEM support and logistics baseline, reducing total program cost and operator training requirements across the fleet.

TAC-6 MK II — MISSION VARIANTS	
Patrol & Force Protection	Armoured double cab · STANAG 4569 Level 1
Indirect Fire Support	GDAMS 120 mm mortar system. Drone-integrated fires
Ambulance Variant	Medical Evacuation (CASEVAC) Protected cab. Field-deployable
Command & Control	Mission-configured communications suite supporting networked operations
Logistics & Forward Resupply	Flat-deck transport. Access where standard logistics cannot follow

ONE ARCHITECTURE · COHERENT FLEET

Shared Toyota OEM components across all platforms. Common service schedule. Common technician training. Common parts network spanning 170+ countries. One acquisition decision – five distinct mission capabilities delivered across a single logistics baseline.

STRIKE VIPER SV6

- Heli-portable Light Reconnaissance & Assault Vehicle.
- C-130 / CH-47 deployable.
- 1,980 kg combat weight.
- 1,300 kg payload. 160 km/h.
- Shares Toyota OEM components, parts and service network with TAC-6 MK II

TAC-6 SPECIFICATIONS

PLATFORM	
Drive Configuration	6 X 6 Permanent AWD
Combat Weight (GVM)	7,000 kg
Payload Capacity	Up to 4,000 kg (mission configuration dependent)
Width	2,000 mm
Height (adjustable)	1,790 mm – 2,050 mm (on-the-fly)
Ground Clearance	280 mm (standard configuration)

POWERTRAIN	
Engine	Toyota 1GD-FTV. 2.8L. 172 kW. 620 Nm
Fuel	Diesel
Transmission	ZF 8HP90. 8-speed auto. 1,000 Nm. 11T GCWR
Drive System	6 x 6 AWD. Hi/Lo transfer case. Elec. locking diffs
Fuel Capacity	310L standard
Ground Clearance	280 mm (standard configuration)
Curb Weight	2,800–5,800 kg (configuration dependent)

PERFORMANCE	
Top Speed	140 km/h (governable)
Cross-Country Speed	80 km/h
Operational Range	1,200 km minimum. 2,000+ km extended
Fording Depth	700 mm (without preparation)
Air-Deployable	C-130. C-390. CH-47
Operating Temp	-32°C to +55°C

PROTECTION	
Ballistic Protection	STANAG 4569 Level 1 (standard)
Up-Armour	Appliqué armour - enhanced STANAG level 1 / 2 available

LIFECYCLE	
Service Life	15–20 years (designed)
MTTR (field repair)	< 20 minutes (field-replaceable units)
COTS Components	> 80%. Toyota global network. 170+ countries