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Factsheet: BIONIX II: Capabilities and Technical Specifications

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BIONIX II

The Bionix II Infantry Fighting Vehicle (IFV) is jointly developed by the Singapore Armed Forces, the Defence Science and Technology Agency, and Singapore Technologies Engineering. The Bionix II is purpose-built as a network capable platform to enable it to operate effectively as part of the 3rd Generation Army. The new platform is also able to deliver more accurate and lethal firepower while providing enhanced crew protection.

BIONIX II CAPABILITY ENHANCEMENTS

System-centric Design. Incorporating new C4I capabilities, the Bionix II will be a key component of the 3rd Generation Army that seeks to deliver precision in manoeuvre, information and strike:

a. Force Connectivity. The Battlefield Management System (BMS) enables the prompt sharing of information about locations and movements of friendly and enemy forces in a fully networked environment. This capability in the Bionix II enables the Headquarters (HQ) to

command and control its deployed forces more effectively.

b. Interoperability with Sensor and Strike Assets. The BMS onboard the Bionix II will enable the command HQs to coordinate the employment of various sensor and strike assets such as Unmanned Aerial Vehicles (UAVs), the Primus Self-Propelled Howitzer (SPH), and the Bronco Mortar Tracked Carrier (MTC).

Enhanced Firepower, Engagement and Survivability.

- **a. Improved Lethality.** Compared to the 25 mm cannon on the original Bionix, the Bionix II is fitted with a 30 mm cannon which delivers an estimated 50% increase in penetration capability.
- **b. Better Fire Control System.** The Day / Night Thermal Sighting System (DNTSS) is an improved version of the sighting system on the original Bionix. It includes an integrated eyesafe laser range finder for accurate target acquisition of up to 3 kilometres. The dual-axis stabilisation system allows enhanced tracking of targets and improves the overall First Round Hit Probability.
- **c. Enhanced Survivability.** The Bionix II features an estimated 50% improved protection against conventional weapons and chemical threats.

TECHNICAL SPECIFICATIONS OF BIONIX II IFV

1	Integrated Knowledge-based Command and Control (IKC2)	
ı	Hardware	AH Integrator - Improved Data Modem
	BMS Terminal - Ruggedised PC	ives of Singapore
	Software	Battlefield Management System
I	BX-AH data communication software	
l	Lethality	
I	General Armament	Turreted Mk44 30mm Cannon
1	1x 7.62mm MG Coaxial	

Enhanced armour protection
70km/h
40km/h
5km/h
400km
0.4m
1.0m
GDDS HMPT 500-3EC Automatic
DDC 6V 92 TA
Diesel
475HP
19.2HP/tonne
5.970m
2.780m
2.770m

Weight (Empty)	20020kg
Weight (Combat)	24800kg
Capacity	10

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