

TL11: Bradley M3A2 Infantry Fighting Vehicle

A further development of the M2 Bradley Infantry Fighting Vehicle, the main difference is the exchange of much of the carried squad for enlarged ammunition stores. The combat weight including crew, passengers, and a full load of fuel and ammunition is up to 23,000kg, and the absolute top weight is 36,000kg (based on VDS structure limits). The armor is aluminium/steel/composite laminate ("Light") with special purpose armor versus shaped charges on the front and side facings. The armour on all facings is hardened versus armour piercing weapons of the same or lower TL. Four bulkheads (AV6) separate the hull into crew, engine, fuel, ammunition and passenger compartments.

The crew consists of the commander and gunner in the turret, and the driver in the front hull. All have individual hatches. The three passengers are in the rear and have a large, powered rear ramp as well as a roof hatch on the rear deck of the vehicle. Installed weapons are a 25mm Autocannon (DV67, Range mod 26) and a coaxial 8mm squad auto-rifle (DV19, Range mod 6), both with 70 degrees of vertical freedom (from 10 degrees below horizontal to 60 degrees above). There is also a double 180mm Anti-Tank missile launcher (DV1350/22E, skill 2/550m/s) in a fixed mount, and two 8mm squad auto-rifles (DV19, Range mod 4) in external anti-aircraft mountings (90 degrees vertical freedom, 60 degrees horizontal) adjacent to the commander's and gunner's hatches. To operate these latter two weapons the appropriate crewmember has to be exposed. The turret itself has 360° rotation, and one revolution takes 4 seconds. To fire the missile launchers the vehicle has to be stationary but the autocannon and the coaxial squad auto-rifle have +4 stabilization.

There are 1,500 rounds for the autocannon, 300 in its magazine and the rest are stored. There are 23 missiles (two in the launcher and 21 in storage), and 9,600 rounds for the auto-rifles (200 each, 9,000 in storage). Reloading the autocannon and the coaxial squad autorifle can be done from the inside of the vehicle but the AT missiles can only be reloaded from the outside.

All crew members have vision periscopes that are +2 Difficulty to see out of and +4 Difficulty to be hit. Hits that penetrate the periscopes (AV10) will blind the vehicle in that direction but will *not* penetrate into the crew compartment. In addition to this basic equipment the gunner has Rating 2 thermal and optical sights as well as a Rating 2 laser rangefinder, all fixed forward relative to the turret. The bonus of the laser and *one* of the sights can be combined when using the autocannon, the coaxial auto-rifle, or the missile launcher. The commander has a Rating 2 optical sensor that can be turned 360° independent of the turret, and the driver has a Rating 2 light intensifier covering the forward 60° vehicle arc. Additional sensors are Rating 1 visible light headlights, and a Rating 3 radio.

Virtually every component is modular for easy replacement. The temperature range of the vehicle is -20°C to +80°C with a 60°C heater/cooler for the entire vehicle volume. The cost is around 600,000Cr at the vehicle's TL11.

Designed by: Bertil Jonell

Specifications:

Configuration:	Box ₁		
Length:	5.4m	Size modifier:	-3
Width:	2.7m	Toughness:	x.25
Depth:	2.2m		

	Area	Volume	Mass
Design figures:	64.2m ²	31.5m ³	23,000kg

Structure:	TL11 Lightweight armor (Turn of 10), AV6		
Stats:	-	.20m ³	450kg
Bulkheads(4)	-	.01m ³	18kg

Surface:	TL11 Lightweight armor		
Front (38.7mm@50° slope, AV187):		.223m ³	783kg
Special vs. shaped charge (+AV452):		.162m ³	567kg
Rear (19.3mm, AV60):	-	.112m ³	391kg
R.side (25.0mm, AV77):	-	.305m ³	1,068kg
Special vs. shaped charge (+AV58):		.076m ³	266kg
L.side (25.0mm, AV77):	-	.305m ³	1,068kg
Special vs. shaped charge (+AV58):		.076m ³	266kg
Top (16.1mm, AV50):	-	.228m ³	798kg
Bottom (12.9mm, AV40):	-	.182m ³	640kg

Power plant:	AV8, TL11 normal (internal combustion)			
Stats:	255kw	1.91m ²	.53m ³	527kg
Extra radiators	1.00m ²		.10m ³	100kg
Generator (22.4kw)	-		.06m ³	63kg

Power train:	AV12, TL11 tracks			
Stats:	227kw	2.1m ²	4.1m ³	2,064kg
Increased AV (to AV36)	-		-	413kg
Track skirts (AV108)	-		-	413kg

Fuel:	Normal (petrochemical), 14 hours		
Stats:	-	.74m ³	738kg

Other:			
Controls	-	.10m ³	50kg
Sensors (see text)	1.5m ²	.50m ³	500kg
Sealed hull	-	.02m ³	44kg
Crew (3), Passengers (3)	-	6.0m ³	480kg
Personal rifles & ammo	-	.06m ³	50kg
Turret	-	7.4m ³	6,229kg
25mm chain gun	-	.19m ³	150kg
Extra ammo (1200)	-	.24m ³	240kg
TOW launcher	-	.16m ³	150kg
Extra ammo (21)	-	1.15m ³	1,155kg
Subtotals:	-	23.2m ³	19,681kg
Spare capacity:	-	8.3m ³	3,319kg

Performance:	19,000kg	23,000kg
Base top speed:	40m/s (143kph/89mph)	37m/s (133kph/83mph)
Adjusted:	21m/s (75kph/47mph)	19m/s (69kph/43mph)
Base acceleration:	2.2	2.0
Adjusted:	2	2
Base deceleration:	2.8	2.7
Adjusted:	8	7
Base Turn Mode:	5	5
Adjusted:	5	5

Bugs:	None		
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