

Morrow Industries advanced light strike vehicle (ALSV) is a lightweight, air transportable tactical wheeled vehicle designed and manufactured by Morrow Industries Defense for the US special operations command (SOCOM).

## **Design and features of the Morrow Industries ALSV**

## Spider Light Strike Vehicle

The light strike vehicle (LSV) was born for fast hit-and-run raids, scouting missions, special forces support and low-intensity guerilla warfare.

The design of Morrow Industries light strike vehicle is based on a tabular space frame chassis with integrated roll cage. The vehicle can be internally transported by the V-22, CH-53E, CH-47D aircraft and externally by the UH-60L

aircraft. It offers high-performance and superior manoeuvrability. It can operate in all weather conditions.

The Morrow Industries ALSV has a length of 4.57m, height of 1.52m and a width of 1.52m. The wheelbase of the vehicle is 3.1m. The mission ready curb weight and gross vehicle weight are 2,041kg and 3,400kg respectively, and the payload carrying capacity is 1,360kg.

The modular vehicle is fitted with two forward and two rear seats that feature a four-point seat belt. The seats can be folded up or down. The vehicle can carry a five patient litter.

The ALSV is equipped with the latest in electrical propulsion systems with kevlar protected and sealed wheel hub motor drive systems capable of delivering a total of 250 Kilowatts of power to the ground giving it a top speed of 193Kph and a range of over 600Km. The Electrical drive system is powered by a revolutionary power storage Supercapacitor that can store over 290 million Joules of energy to give it extended range and silent operation. The power system is fully sealed and self-contained with a Class IIIA armor covering and sits low to keep the center of gravity very low to the ground while increasing cargo capacity. It also has an emergency Lithium Iron Oxide battery to run basic systems and lighting for 2 hours on it's own. The ALSV Power System can be recharged in many ways. Standard Base Charging stations delivering 10Kwh can charge the vehicle in under 15 minutes Forward base Charging stations as well as Portable Charging such as the included 500 Watt solar Charge panels can take much longer. Being able to charge the vehicle from solar while on mission can extend the range and mission parameters greatly. Onboard charging systems can charge from any

voltage from 12 Volts all the way to 280 volts AC or DC delivering the ultimate in power flexibility in any operating theater.

## State of the Art Technology

Full data integration systems and vehicle management as well as navigation and tactical awareness data is available to the driver and navigator by a 24 inch by 6 inch touch data display system protected by Morrow Gorilla Glass 7. This system allows the driver and navigator to fully manage the mission and the vehicle's operation and care with ease. Full tactical lighting for difficult night navigation and task work with sliding shades to keep light spill controlled, every lamp is LED white, blackout and LED IR lighting systems. Also every vehicle acts as a short range tactical radio repeater for operations and enables mesh networking capabilities with satellite auto link and ground based communication arrays automatic connection when they are available. Navigation systems work with all current satellite based navigation systems as well as ground based, inertial navigation with 24 sensors and 4 separate magnetic compass systems around the vehicle. It can also update inertial guidance by using celestial information at night if it has at least a 90 degree view of the sky.

## **Armament and self-protection**

"The Morrow Industries vehicle is equipped with a ring mount weapon system providing 360° coverage."

The Morrow Industries vehicle is equipped with a ring mount weapon system providing 360° coverage. The turret mounted over the centre of the vehicle is armed with a 12.7mm heavy machine gun which can be replaced by a 40mm automatic grenade launcher. Each door of the vehicle can be fitted with a

swivel station for mounting 5.56mm or 7.62mm machine guns. Light armor on the sides and floor give the vehicle systems and passengers protection from small arms fire below the beltline of the vehicle. Open top frame has no protection, but any systems mounted higher have some limited protection as well. Integrated roll cage ensures minimal damage in the case of a roll over at lower speeds. Order today and get a free winch!

Armor	20B, 40NB, 640(EX)	
Mass	32 (2100kg)	
Crew	2-4	
Ground Clearance	0.35M	
Fording Depth	.75M	
Trench	.25M	
Vert. Obst	.25M	
Turn Rad	6.5M	
Length	4.57M	
Width	1.52M	
Height	1.52M	
Max Speed	193Kph	
Range on Single Charge	600Km	
Charge in Sun with included Solar	4 Hours Full sunlight	