

STAVATTI™ SM-315 STILETTO



Powered by
F125XX

ADVANCED LIGHT FIGHTER

SM-315 STILETTO

Performance & Specifications

FLYAWAY COST: CONTACT STAVATTI

AVAILABILITY: TBD

TYPE

Light Fighter (LF), Air Defense Fighter (ADF) and Armed Reconnaissance (AR) Aircraft

ACCOMMODATION

Flight Crew of One Seated on a Martin Baker MK16E or MK 18 Zero-Zero Ejection Seat

POWERPLANT

One (1) Honeywell F125XX Afterburning Turbofan delivering 7,263 kgf st with Afterburner and 5,220 kgf st at Military Power. The powerplant is fitted with variable geometry, thrust vectoring and reversing 2D nozzle.

STRUCTURE

Semi-monocoque aluminum lithium and aluminum honeycomb sandwich construction throughout. Titanium used in high fatigue areas and high temperature regions. Extensive use of Laser and Friction Stir Welding in all assemblies.

ARMAMENT

Fixed: One fuselage mounted M61A2 20mm gatling cannon with 500 rds

Expendable: Internal Weapons Bay and six external wing hardpoints for up to 3,223 kg of external stores

DIMENSIONS

Wingspan	7.32 m	Wing Area	16.35 sq m
Length Overall	12.70 m	Wheelbase	4.78 m
Height Overall	2.74 m	Wheeltrack	3.25 m

WEIGHTS & CAPACITIES

Empty Weight	3,858 kg
Max Internal Fuel	1,725 kg
Max Payload	3,495 kg
Mid-Mission Weight (MMW)	4,993 kg
Max Take-Off Weight (MTOW)	9,078 kg

LOADINGS

Wing Loading @ MMW (kg/sq m)	305
Thrust-to-Weight @ MMW	1.45
Wing Loading @ MTOW (kg/sq m)	555
Thrust-to-Weight @ MTOW	0.80
Positive Load Limit @ MTOW	9.0

PERFORMANCE

Max Level Speed @ SL	1.23 Mach	Max Climb Rate @ SL; MTOW	164 m/sec
Max Level Speed @ FL350	2.19 Mach	Max Climb Rate @ SL; MMW	303 m/sec
Max Cruise Speed @ SL	0.90 Mach	Dash Range @ 2.19 Mach	257 km
Max Cruise Speed @ FL350	0.90 Mach	Dash Radius @ 2.19 Mach	111 km
Typical Cruise Speed @ SL	0.80 Mach	Cruise Range @ 0.90 Mach	2,374 km
Typical Cruise Speed @ FL350	0.80 Mach	Cruise Radius @ 0.90 Mach	674 km
Takeoff Speed; MTOW @ SL	328 km/hr	Ferry Range with External Tanks	3,719 km
Stall Speed; MTOW @ SL	274 km/hr	Takeoff, Ground Roll @ SL-TTW	287 m
Approach Speed; Landing Weight @ SL	230 km/hr	Takeoff, BFL @ SL-TTW	500 m
Stall Speed; Landing Weight @ SL	191 km/hr	Landing, Ground Roll @ SL-TLW	458 m
Service Ceiling Exceeds	18,288 m	Landing, BFL @ SL-TLW	683 m

