

ISLANDER I800

Islander I800 is Islander Aerospace's first long-range widebody airliner that can seat 260-290 in two class configuration or up to 440 in high-density layout. The I800 is the first commercial airliner to feature a C-wing design.

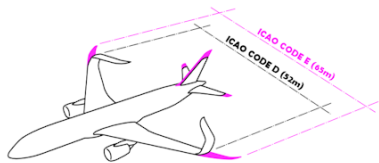
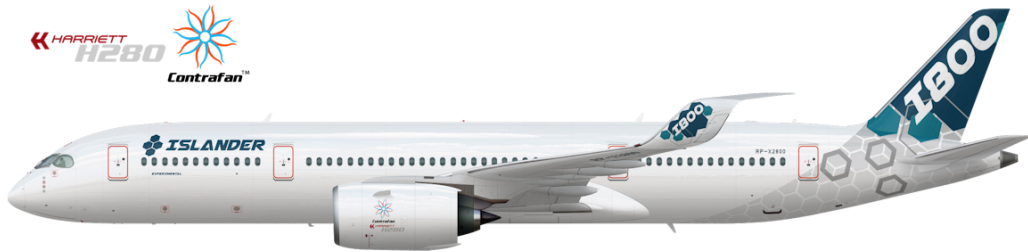
The I800 is designed with much commonality with previous Islander aircraft like the I600 and I700 with similar avionics and cockpit displays. Many parts are related to other Islander aircraft or scaled up versions. The vertical and horizontal fins are taken from the I700 with minor adjustments to fit the I800 body. The C-wing enables the aircraft to have smaller tail fins than conventional aircraft.

The Harriett H280 is the only engine option for the I800. This engine has a revolutionary twin contra-rotating fan design

that enables a 16:1 bypass ratio without requiring a large fan diameter. The contra-rotating fans cancel out the torque reducing the stresses on the pylons. Another advantage is the exhaust velocity is very high for such a high bypass ratio which enables the aircraft to sustain high cruise mach.

The C-wing is the most unique feature of the I800. This design is chosen to enable the aircraft to fit in ICAO code D airport gate (same as I700). The C-wing allows for a greater effective aspect ratio improving efficiency in cruise. The C-wing also spreads out the wake vortices to lessen induced drag and wake turbulence.

The cabin is designed closely with the familiar I600 cabin with rotating overhead bins and LED lighting. The cabin is optimized for 18 inch 9-abreast seating.

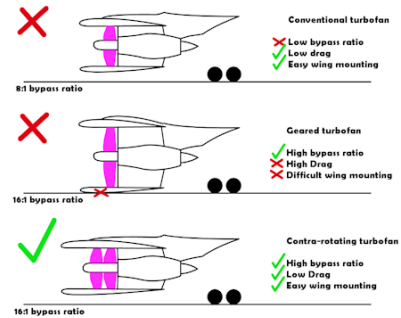


- ✓ Less span for more aspect ratio
- ✓ Fits in smaller Code D airport gate
- ✓ Smaller Vertical/Horizontal stabilizer
- ✓ Less intense wake vortex characteristics



C-wing design gives new control surface function opportunity. The I800 is designed to have a flap at the vertical section of the C-wing to aid the smaller rudder in yaw control. This flap functions by differentiating the drag on each wing. This flap can also function as an additional spoiler for braking. If used as a spoiler in flight, this flap does not bring up the stall speed of the aircraft.

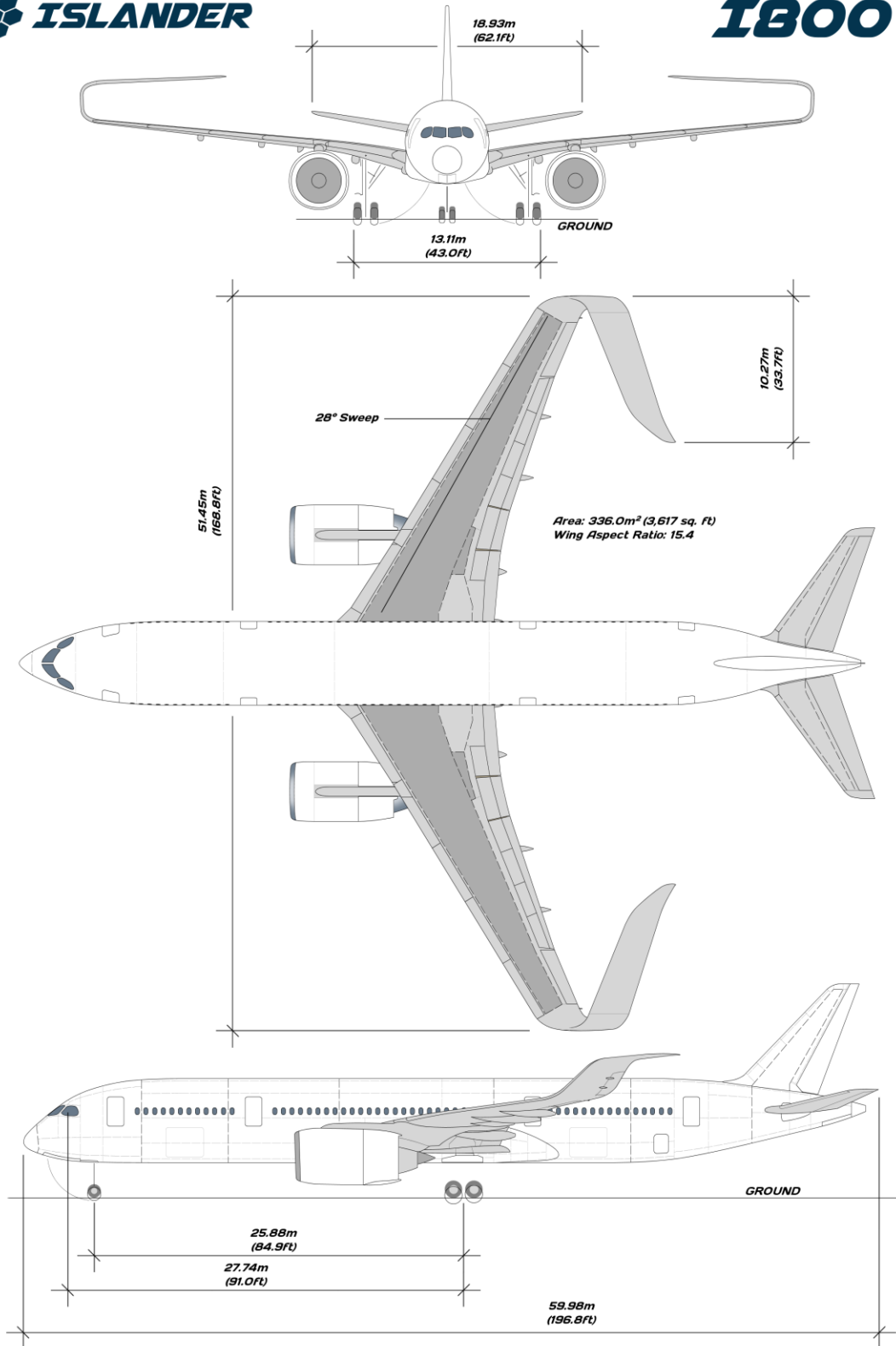
Harriett Aviation Engines innovations on turbofan engines beyond 16:1 bypass ratios for 33-36% increase in fuel efficiency over previous generation engines.



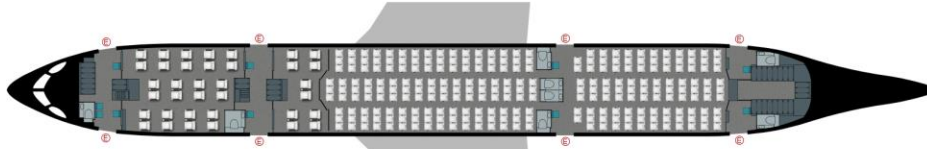
CREW		FUEL	
Cockpit	2	Volume	107,280L / 23,340 US gal
PASSENGERS		Wing + center tank	107,280L / 23,340 US gal
Maximum	440	Aux. tank	N/A
1-class	384	Weight	86,900kg / 191,580 lb
2-class	289	PERFORMANCE	
CARGO		Range	13,880km / 8,820mi / 7,490nm
Volume	154.9m ³ / 5,085 cu ft	Speed max.	Mach 0.89
ULD	32x LD3	Speed cruise	Mach 0.84
Bulk	10.9m ³ / 385 cu ft	Service ceiling	13,100m / 43,000 ft
OVERALL GEOMETRY		Takeoff run	2,750m / 9,020 ft
Length	59.98m / 196.8 ft	ENGINES	
Wingspan	51.45m / 168.8 ft	Harriett 280-A	
Fuselage width	5.87m / 19.3 ft	Thrust	280kN / 62,950 lbf
Cabin width	5.55m / 18.2 ft	Harriett 280-B	
Wheelbase	25.88m / 84.9 ft	Thrust	295kN / 66,320 lbf
WINGS			
Wing area	336.0m ² / 3,617 sq. ft		
(exposed + center box)			
Aspect ratio	15.4		
Wing loading	717.17kg/m ² / 146.88 lb/sq. ft		
Sweep	28.0°		
WEIGHTS			
MTOW	240,970kg / 531,250 lb		
MZFW	154,070kg / 339,670 lb		
OEW	124,400kg / 274,260 lb		

ISLANDER

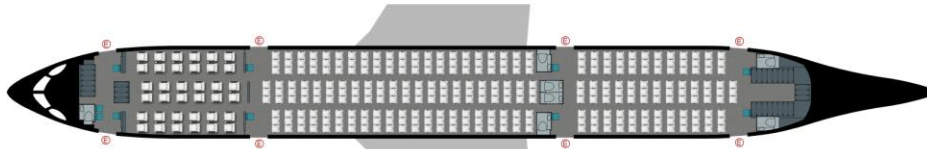
IBOO



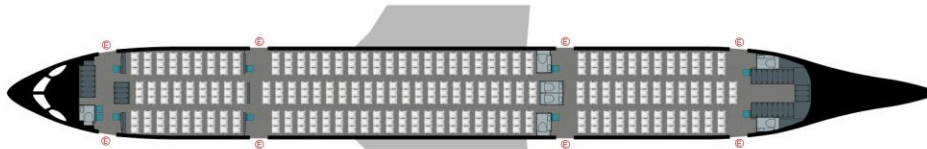
GENERAL DIMENSIONS



2-class long-haul 36C + 253Y



2-class short-haul 36C + 303Y



1-class 384Y



Dense 440Y

TYPICAL CONFIGURATIONS