



GE Aerospace

Passport™

High bypass turbofan

Setting new standards for ultra-long-range business jet reliability and efficiency

Sporting a thrust just under 19,000 pounds, GE Aerospace's Passport engine powers Bombardier's latest and most elite ultra-long-range business jet, the Global 7500. Designed and built for range and comfort, Passport incorporates a blend of technology created and honed by GE Aerospace over decades of experience and success in commercial and military engine design.

GE Aerospace's Passport is an industry leader in energy extraction, fuel efficiency, emissions, and noise. From its one-of-a-kind fan bladed disk and active clearance control to the proprietary exhaust system and high efficiency tail mixer, Passport incorporates GE Aerospace's best engine technology throughout its architecture.

With an advanced, rich-burn combustor grounded in jumbo commercial design, Passport is the most efficient in fuel burn within its class as well as the

quietest engine GE Aerospace has ever produced. And with a fuel efficiency of 3% better than other engines in its thrust class, Passport meets and, in cases, exceeds the industry regulations on emissions

Another notable accolade of the Passport engine is being GE Aerospace's first integrated power plant design of core and nacelle, which optimizes across the full system.

Boasting an industry-leading pressure ratio of 45:1, Passport delivers a step change in efficient design through a combination of product design, aerodynamics, materials sciences, and manufacturing. Through these and other evolutionary and revolutionary developments, Passport was a key enabler to Bombardier's making history in 2020 by issuing the first-ever Environmental Product Declaration for a business jet on its Global 7500.

Powered by the industry's most cutting-edge technology, Passport puts flexibility and freedom at your fingertips, all while delivering the performance, reliability, sustainability, and comfort you'd expect in the world's premium business jet. a two-stage planetary gearbox.



The Passport is raising the bar of engine performance and environmental sustainability through commercial-grade technology



Range and sustainability

The Passport engine delivers a truly record-setting range capability, recently helping Bombardier’s Global 7500 fly a record 8,255 nm between Sydney and Detroit. And with a fuel efficiency of 3% better than other engines in its thrust class, Passport meets and, in cases, exceeds the industry regulation on emissions.



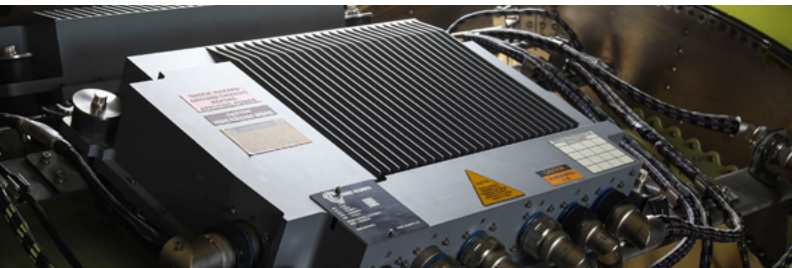
Emissions and noise

Passport is the quietest engine within GE Aerospace’s portfolio, solidly meeting the FAA’s Sage 4 noise requirements – providing passengers with onboard comfort of a nearly client flying experience.



Prognositcs

Beyond standard performance monitoring. The Passport engine’s advanced, onboard prognostics generate greater predictability, reducing down time and maintenance costs.



Physical information

Fan airfoils	18
Fan diameter	52
Fan/Booster/Compressor stages	1/3/10
High-pressure turbine	2
Low-pressure turbine	4
Nacelle	Long duct mixed flow
Length	130 in
Weight	3,600 lb

Capability

Takeoff thrust	17,325 lbs – 18,920 lbs
Noise	13.6 dB Cumulative Margin to Stage 4
Fan speed	6,031 rpm
Core speed (rpm)	19,680 rpm
Bypass ratio	5.6:1
Overall pressure ratio at max power	45:1
Compressor pressure ratio	22:1
Emissions Margin to CAEP/6 Range	NOx: 20% CO2: 87%

© 2023 GE – All rights reserved.
GE Aerospace reserves the right to make changes in specifications and features shown herein, or discontinue the product described at any time without notice or obligation.
Contact your GE Aerospace representative for the most current information.

The GE Aerospace wordmark and the GE Monogram are trademarks of GE Aerospace.
Global 7500 and 8000 are registered trademarks of Bombardier