



# SPECIFICATIONS

## WEIGHTS

Model	Citation Excel Eagle
Maximum Ramp	20,200 lb
Maximum Takeoff	20,000 lb
Maximum Landing	18,700 lb
Maximum Zero Fuel	15,000 lb
Maximum Fuel - Volume	1,006.0 gal
Maximum Fuel - Weight	6,740 lb
Typical Empty (no crew)	12,425 lb
Basic Operating Weight (incl. crew, if applicable)	12,825 lb
Crew	2 Pilots
Useful Load (Ramp - BOW)	7,375 lb
Maximum Payload (ZFW or MLW - BOW)	2,175 lb
Full-Fuel Payload (Useful Load - Fuel)	635 lb

## ENGINE DATA

Models	Cessna Citation Excel
Manufacturer	Pratt & Whitney Canada
Model	PW545A
Type	Turbofan
Fuel Type	JetA
Engine Output - Sea Level	3,804 lb
Engine Flat Rating Temperature	ISA + 13C
TBO Interval**	6,000 hr, 12,000 hr, 17,000 hr
Power Loading (MGTOG / total engine output)	2.63 lb/lb
Bypass Ratio	4.00:1
Prist Required (turbine powered aircraft)	No

\*\*[Link to Citation Excel Eagle PowerAdvantage Program](#)

## EXTERIOR DIMENSIONS

Models	Cessna Citation Excel
Overall - Length	51 ft 10 in
Overall - Height	17 ft 5 in
Overall - Wing Span	55 ft 8 in
Overall - Horizontal Stabilizer Span	21 ft 6 in
Cabin Door - Height, Front/Rear	54.00 in / 54.00 in
Cabin Door - Width, Top/Bottom	24.00 in / 24.00 in
Baggage Door - Height, Front/Rear	29.00 in /
Baggage Door - Width, Top/Bottom	25.00 in /
Emergency Exit - Height	40.00 in
Emergency Exit - Width	22.00 in

## CABIN AND BAGGAGE

### Models

Interior - Overall Length (bulkhead to bulkhead)  
Interior - Cabin Area (cockpit divider to rear bulkhead)  
Interior - Seating Area (cockpit divider to aft divider)  
Interior - Height  
Interior - Width  
Passenger Seats (standard to maximum)  
PSI Differential  
Sea Level Cabin to (altitude)  
Cabin Altitude at Certified Ceiling  
8,000 foot cabin at (altitude)  
Baggage Capacity - Internal Weight  
Baggage Capacity - Internal Volume  
Baggage Capacity - External Weight  
Baggage Capacity - External Volume

### Cessna Citation Excel

24 ft  
18 ft 6 in  
15 ft 4 in  
68.00 in  
66.00 in  
8 - 9 (9th seat optional)  
9.30 psi  
25,230 ft  
6,800 ft  
45,000 ft  
84 lb  
10.00 ft<sup>3</sup>  
700 lb  
80.00 ft<sup>3</sup>

## CERTIFICATION

### Models

Certification Basis  
Approved Runway Surfaces  
Steep Approach Certified?

### Cessna Citation Excel

Part 25  
Hard, gravel  
Yes

## KEY DATES

### Models

Announced  
First Flight  
FAA Certification  
First Delivery  
First Customer Delivery  
MSG-3 Issued

### Cessna Citation Excel

10/1/1994  
2/29/1996  
4/22/1998  
7/2/1998  
7/2/1998  
1/31/2007

## MODEL INFORMATION

### Models

Model Number  
Serial Numbers  
Production Status  
Years Produced  
Total Units Delivered

### Cessna Citation Excel

560XL  
560-5001 thru -5372  
Model 560 lineage still in production  
1998 - 2004 (lineage 2004 - present)  
370 (lineage > 1,000)

## AVIONICS

### Models

Avionics Package

### Citation Excel Eagle

Garmin G5000

## AIRPORT PERFORMANCE

### Models

Takeoff Field Length - Sea Level, ISA, MGTOW  
Takeoff Distance - 5,000 Feet, 25C  
- 5,000 Feet, 25C Weight Restriction  
Takeoff Distance Basis  
Landing Distance - Sea Level, ISA, MLW  
Landing Distance - Typical LW with Fuel Reserves  
- Typical LW with Fuel Reserves  
Max Takeoff and Landing Altitude

### Cessna Citation Excel

3,650 ft  
5,770 ft  
None  
BFL  
3,180 ft  
2,710 ft  
14,900 lb  
14,000 ft

## CLIMB AND CEILING PERFORMANCE

### Models

Rate of Climb  
Direct Climb to  
Service Ceiling - All Engines  
Certified Ceiling

### Cessna Citation Excel

3,790 ft/min  
FL430 in 21 min  
44,000 ft  
45,000 ft

## SPEEDS

### Models

MMO  
- Altitude  
Maximum Cruise Speed True Air Speed  
- Typical Cruise Speed True Air Speed  
- Cruise Speed Parameter

### Cessna Citation Excel

0.750 M  
Above 26,515 ft  
432 kts  
400 - 430 kts  
HSC

## RANGE

### Models

Calculated Range Parameters

Passenger Weight

### Power Setting

Average Cruise Speed  
Range - FullFuel, Max Takeoff Weight  
Range - 2 Passengers  
Range - 4 Passengers  
Range - 6 Passengers  
Range - 8 Passengers  
Advertised Range  
- Advertised Range Parameters

### Cessna Citation Excel

NBAA IFR Reserve (100 nm), FL450, 2 Pilots,  
HSC Power  
200 lb

HSC	LRC
0.7 M	0.642 M
1,863 nm	1,993 nm
1,875 nm	2,016 nm
1,770 nm	1,887 nm
1,609 nm	1,705 nm
1,449 nm	1,523 nm
1,836 nm	

NBAA IFR Fuel Reserves (100 nm), HSC,  
Max Fuel, Max Takeoff Weight

## SPEED AT ALTITUDE

True Air Speed

### Models

Power Setting  
Mid-Cruise Weight  
10,000 feet  
16,000 feet  
20,000 feet  
26,000 feet  
29,000 feet  
31,000 feet  
33,000 feet  
35,000 feet  
37,000 feet  
39,000 feet  
41,000 feet  
43,000 feet  
45,000 feet

### Cessna Citation Excel

HSC  
17,000 lb  
353 kts  
385 kts  
408 kts  
427 kts  
428 kts  
430 kts  
432 kts  
430 kts  
427 kts  
423 kts  
418 kts  
410 kts  
395 kts

## TRIP TIME AND FUEL

### Models

Parameters  
Reserve Fuel Amount

### Trip Distance

- 100 nm Trip  
- 200 nm Trip  
- 300 nm Trip  
- 400 nm Trip  
- 500 nm Trip  
- 700 nm Trip  
- 1000 nm Trip

### Cessna Citation Excel

NBAA IFR Reserve (100 nm), HSC Power  
1,204 lb

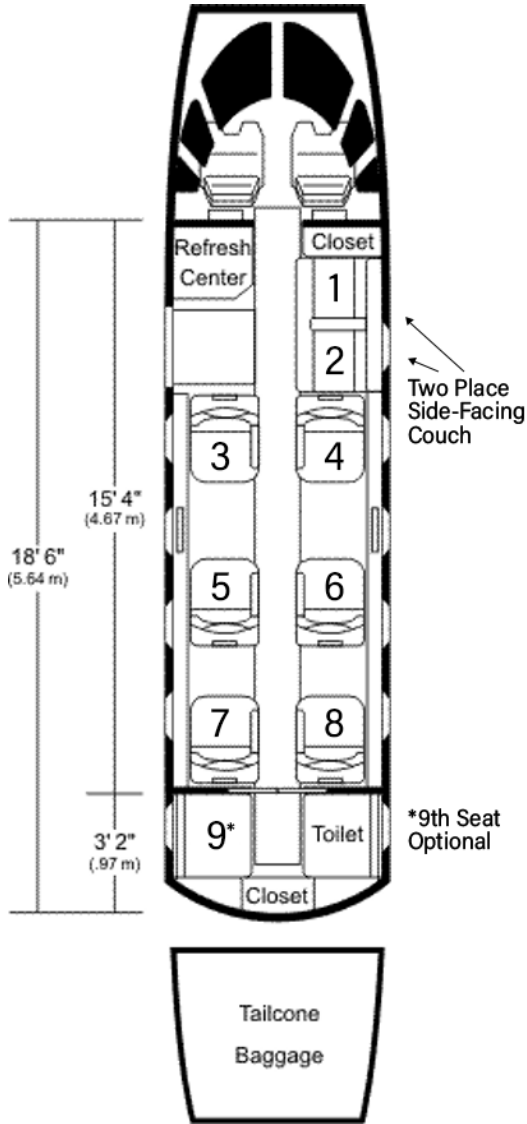
Time (hh:mm)	Block Fuel
<b>Flight Level (ft x 1,000)</b> 0:18 hr @FL 160	681 lb
0:32 hr @FL 260	1,125 lb
0:46 hr @FL 330	1,444 lb
1:01 hr @FL 400	1,602 lb
1:15 hr @FL 410	1,878 lb
1:44 hr @FL 410	2,485 lb
2:27 hr @FL 410	3,401 lb

## SUPPORT PROGRAMS

[Click here to view our support programs.](#)

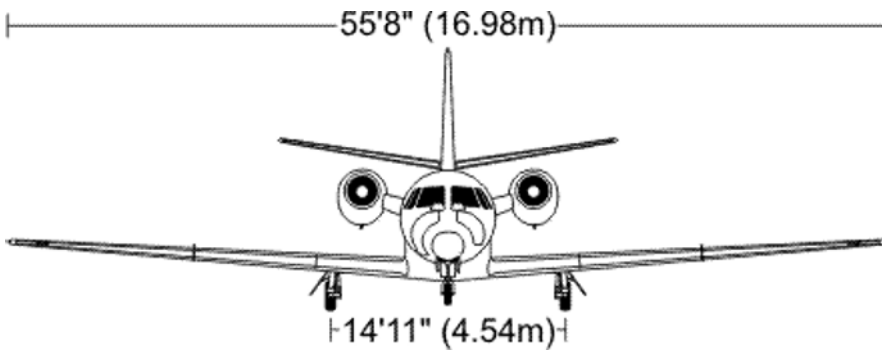
# STANDARD CABIN

Citation Excel Eagle



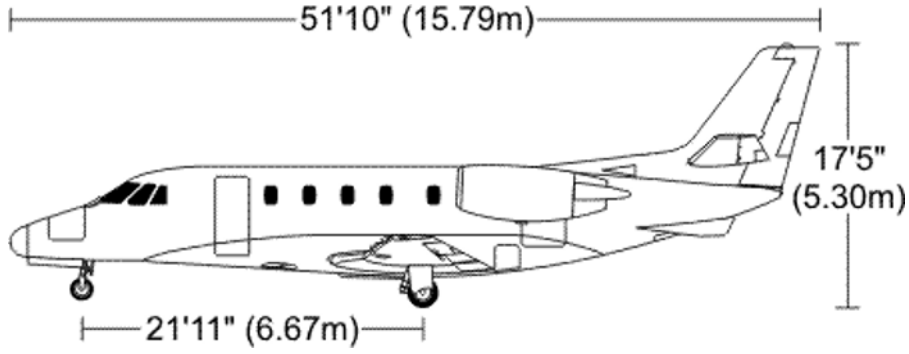
# EXTERIOR FRONT

Citation Excel Eagle



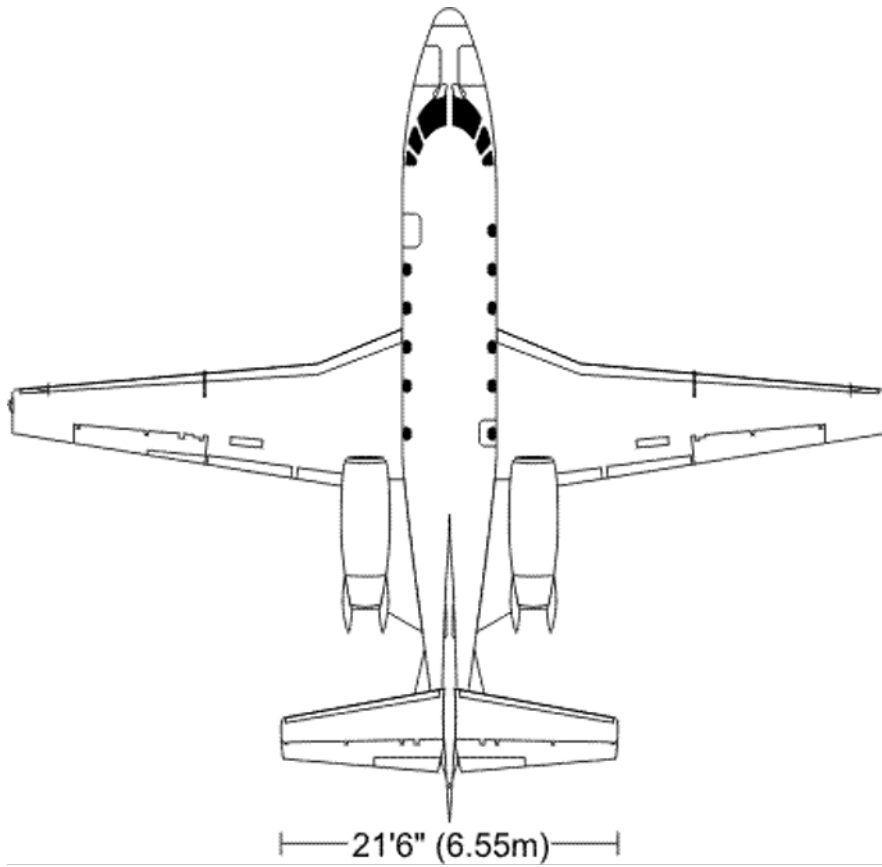
## EXTERIOR SIDE

Citation Excel Eagle



## EXTERIOR TOP

Citation Excel Eagle



# SYSTEM DESCRIPTION

## FUEL SYSTEM

### Cessna Citation Excel

Two integral wing tanks, one in each wing. Each tank holds approx. 503 gal of useable fuel (1,006 gal total). Each wing tank supplies its respective engine through use of a primary ejector pump in the sump component of the tank. Three additional transfer ejector pumps scavenge fuel to the wing sump. An electric boost pump in each wing supplements primary ejector pump for backup, engine start, fuel transfer, and optional APU only operation.

Fully automatic. Crossfeed capability.

Standard single point pressure refueling/defueling, located on right side of the fuselage just forward of the wing. System is independent of the fuel system. Gravity fuel fill port on each wing.

Utilizes Electronic Engine Control (EEC) fuel controller. EEC is a single channel system with manual mode. Fuel is heated through an oil heat exchanger.

## HYDRAULIC SYSTEM

### Cessna Citation Excel

Single, open-center, 1500 psi hydraulic system operates landing gear, flaps, speed brakes, two-position horizontal tail, and thrust reversers. Circulates at 60 psi.

Hydraulic pressure supplied by two engine-driven pumps. Either pump has the capacity to power all systems.

An independent, closed-center, hydraulic system is used for wheel brakes. Powered by an electric pump in the left side of the nose compartment. Operates at 1,000 psi. Motor only runs when landing gear are in the down position.

## FLIGHT CONTROL SYSTEM

### Cessna Citation Excel

Ailerons, elevator and rudder are mechanically operated by use of cables. Rudder and aileron are interconnected.

The aileron, elevator and rudder have manual trimmed control surfaces. Aileron trim has one tab on left aileron. Elevator trim tabs on both elevators can be positioned mechanically or electrically. Rudder trim incorporates servo/trim tab for reducing pedal pressures. A rudder-aileron interconnect via torsion bungee coordinates roll and yaw inputs.

Two-position stabilizer with takeoff/landing setting or cruise setting. Operates automatically based upon flap setting and are hydraulically actuated.

Fowler type inboard and outboard actuated flaps are electrically controlled and hydraulically actuated with a range of 0 to 35 degrees down.

Speed brakes on upper and lower surfaces of each wing are electrically controlled and hydraulically actuated. Speed brakes can be extended to within 50 ft AGL.

Mechanical nose wheel steering through rudder pedals.

Rudder bias system increases rudder travel from 22 degrees to 28.5 degrees in the event of an engine failure. Utilizes engine bleed air to power a pneumatic actuator. Rudder bias and rudder bias heater must also be operational for dispatch.

Stick shaker stall warning system. Stick pusher not required.

Mechanically operated control lock engages, ailerons, elevators, rudder, and throttles.

## ENVIRONMENTAL SYSTEM

### Cessna Citation Excel

Uses bleed air for pressurization and air conditioning. Digital controller regulates two outflow valves in aft pressure bulkhead. In auto mode, only set destination elevation. Controller has an auto-schedule for controlling pressure and rates of change - 600 fpm cabin climb rate and 500 fpm descent rate to fully depressurized by 1,500 ft. above landing altitude.

Emergency dump available for rapid depressurization. Emergency pressurization source from left engine directly into the cabin - no temperature control in that mode.

Single air cycle machine for cooling. Bleed air passes through pylon-mounted heat exchangers, then through a primary heat exchanger, then through the air cycle machine. Air outputted from ACM is routed through a water separator and then into the cool air overhead distribution system or mixed with hot bleed air and ducted through the floor and armrests distribution system. Two ozone converters filter engine bleed air prior to ACM.

Standard vapor cycle air conditioning system incorporates an aft cabin evaporator which supplies cool air through the overhead system and forward evaporator that blows cool air directly into the cabin through a floorboard grating. Operates up to 18,000 ft or on the ground by either a ground power cart or one operating engine.

Separate cabin and cockpit distribution systems/temperature zones controlled in cockpit. Optional cabin temperature control.

Honeywell RE100XL APU installation removes standard vapor cycle air conditioner. APU for ground cooling and inflight use. Can be started up to 20,000 ft and operated up to 30,000 ft. APU is not approved for unattended operation.

O<sub>2</sub>: 76 cu ft bottle standard.

1/O<sub>2</sub>: 100% fresh air is delivered to the cabin.

## ELECTRICAL SYSTEM

### Cessna Citation Excel

Two, 28 volt DC, 300 ampere engine-driven starter-generators supply power through two buses that operate in parallel. (Starter-generators rated at 200 amps for ground operation.)

AC power from engine-driven alternators is used to power the electric windshield only. An AC inverter powers the electroluminescent panel lighting.

Standard 24 volt, 44 amp-hour nickel-cadmium battery housed in the LH aft fairing. External 28 volt DC power receptacle is located below the LH side below the engine pylon. APU supplies electrical power on the ground.

## ICE AND RAIN SYSTEMS

### Cessna Citation Excel

Engine bleed air for anti-ice protection on engine inlets and wing leading edges. Pneumatic boots for de-ice protection on horizontal stabilizer leading edge surfaces. Electrically heated windshields (AC power) for anti-ice and defog capabilities.

Electrical heating elements on pitot tubes, static ports, TAS probe, and angle of attack probe. Windshield rain removal accomplished with high speed air by electric fan in nose avionics compartment.



## POWER PLANTS

### Cessna Citation Excel

Two Pratt & Whitney PW545A two stage, turbfans. A centrifugal compressor is driven by a high pressure turbine. Single fan and axial compressors driven by three low pressure turbines. Combustion chamber is a reverse flow design.

Fuel control is through a single channel Electronic Engine Control (EEC) with manual mode. Throttle detents send signals to EEC in auto mode. Aircraft can be dispatched in manual mode. Engine Diagnostic System (EDS) provides for troubleshooting.

Engine equipped with ground idle system which automatically reduces idle speed eight seconds after landing gear squat switches have sensed a landing. Normal flight idle is 56.5%.

Target-type thrust reversers are standard (hydraulically operated). Engine synchronizer is standard.

Equipped with fire detection loop (each engine) and two Freon fire extinguishing bottles (for both engines), electrically operated.

## LANDING GEAR AND BRAKES

### Cessna Citation Excel

Landing gear is electrically controlled and hydraulically actuated. Main gear are trailing-link design with single wheel assembly and air over oil struts. Held up by mechanical uplocks that are normally released hydraulically.

Nose wheel is mechanically steered by the rudder pedals.

Emergency extension through a manual release of the uplocks and gravity free-fall and through a pneumatic blow-down and lock system.

Brakes: Carbon disc brakes on main wheels operate through separate hydraulic system using an electric pump housed in the LH nose compartment. System operates only when gear are down.

Standard digital anti-skid system must be operational for takeoff.

Pneumatic back-up system with bottle on LH side of forward pressure bulkhead (same system used for emergency gear extension).

There is no turn-around time limitation on the brakes, other than an Ops Manual explanation that says "The parking brake should not be set if the brakes are very hot".

## AVIONICS AND COCKPIT

### Cessna Citation Excel

Garmin G5000 avionics system featuring a fully integrated glass flight deck, integrated autopilot and EICAS systems, dual touchscreen controllers, weather radar and Sirius/XM weather datalink, Garmin Flitecharts, Garmin Safe Taxi, and WAAS GPS-guided LPV approach capability to 200' minimums. Also includes RVSM and ADS-B compliance.

Standard equipment includes:

Standard Avionics Equipment

- Three GDU 1450W 14" displays (2 PFD and 1 MFD)
- Dual GCU 275 controllers
- GMC 700 dual autopilot
- GEA 7100 engine/airframe EICAS system
- Dual GIA 64E GPS/NAV/COM
- Dual GTX 3000 ADS-B transponders (ADS-B Out)
- Dual GTC 575 touchscreen controllers
- Dual GMA 36B audio panels

- GWX 75 radar with 12" antenna
- GDL 69A Sirius/XM weather datalink (subscription required)
- TAWS A
- Dual GRS 79 AHRS
- Dual GDC 7400 RVSM ADC

#### Additional Avionics and Standard Equipment

- Honeywell TCAS 2000
- Meggitt II standby ADI
- ATG 5000 Wi-Fi
- USB ports at each cockpit seat, at each forward club seat, at each forward-facing aft seat

No overhead or side switches, gages, or controls.

## CABIN AND BAGGAGE SYSTEM

### Cessna Citation Excel

Constant cross section with 11 windows and a 13 inch wide dropped aisle extends from cockpit divider to the aft bulkhead. 6,800 ft cabin at 45,000 ft.

Standard Interior: Eight individual passenger seats in a forward club configuration. Seats are pedestal mounted, track fore and aft 7 inches, laterally 3.6 inches, 360 degree swivel and infinite recline (fully berthable). Seats have a single, inboard, lift-type armrest (dual armrest an option).

Seat dimensions: 19" seat cushion width (17.5" with dual armrests), 20" back cushion width. Side facing seat: width = 20", seating depth = 14".

LH & RH tables.

Aft LH belted, flushing toilet. Lav divider has sliding privacy doors with mirror treatment. Aft centerline closet. LH forward refreshment center - measures 23.7" wide.

Cockpit divider with 1/2 length curtain.

Up to 9 passenger seating arrangement including RH forward 2-place side-facing couch and belted seat in the aft Lav (9th seat optional). Cockpit sliding doors, various forward closets and refreshment centers, dual arm rests. Externally serviceable RH non-belted toilet. Entertainment systems

Baggage: Aft tailcone baggage compartment not heated nor pressurized. Aft baggage door sill height: 44".

## AIRFRAME

### Cessna Citation Excel

Eleven (11) boundary layer energizers on leading edge of each wing - all required for dispatch. Stall strip on leading edge of each wing.

Fifty two (52) vortex generators on top of wings. Up to 3 may be missing for dispatch provided the aircraft is limited to FL410.

Limitations: Anti-skid must be operational for takeoff. Rudder bias and rudder bias heating system must be operational.

Flaps are composite.

Outside fuselage diameter = 72.5 in.