

PIPER PA-32R-301 SARATOGA SP

SPECIFICATIONS

ENGINE

Manufacturer	Lycoming
Model	IO-540-K1G5D
Rating (hp @ rpm) (Take-off)	300 @ 2700
Rating (hp @ rpm) (Continuous) - 2 Blade Prop	294 @ 2600
Rating (hp @ rpm) (Continuous) -3 Blade Prop (Optional)	300 @ 2700
Number of Cylinders	6
Recommended TBO (hrs)	2000

PROPELLER

Manufacturer	Hartzell
Number of Blades	2
Type	Constant Speed
Diameter (in/cm)	80/203

WEIGHTS

Ramp Weight (lbs/kg)	3615/1639
Gross Weight (lbs/kg)	3600/1633
Standard Empty Weight (lbs/kg)	1999/907
(Includes unusable fuel, full oil and full operating fluids)	
Standard Useful Load (lbs/kg)	1616/733

WING AREA AND LOADINGS

Wing Area (ft. ² /m ²)	178.3/16.6
Wing Loading (lbs/ft. ²) (kg/m ²)	20.2/98.7
Power Loading (lbs/hp) (kg/hp)	12.0/5.5

DIMENSIONS

Wing Span (ft/m)	36.2/11.0
Length (ft/m)	27.7/8.4
Height (ft/m)	8.5/2.6
Cabin Length (Instrument Panel to Rear Bulkhead) (in/cm)	124.25/315.6
Cabin Width (in/cm)	48.75/123.8
Cabin Height (in/cm)	42.0/106.7
Headroom (Seat to Ceiling)	
Front Seats (in/cm)	38/96.5
Middle Seats (in/cm)	35.75/90.8
Rear Seats (in/cm)	34.5/87.6
Forward Baggage Door Size (in/cm)	16/40.6 x 22/55.9

Aft Baggage/Utility Door Size (in/cm)	20.5/52.1 x 26/66.0
Forward Cabin Door Size (in/cm)	35/88.9 x 36/91.4
Aft Cabin Door Size (in/cm)	28.5/72.4 x 28/71.1
Wheel Base (ft/m)	7.95/2.41
Wheel Tread (ft/m)	11.1/3.39

FUEL CAPACITY

Total Capacity (gal/L)	107/405
Usable Fuel (gal/L)	102/386

OIL CAPACITY (qts/L)	12/11.35
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BAGGAGE

Volume (ft ³ /m ³)	
Forward Compartment	7/20
Aft Compartment	17.3/49
Capacity (lbs/kg)	
Forward Compartment	100/45.4
Aft Compartment	100/45.4

PERFORMANCE

MAXIMUM SPEED (kts/kmh)	
(TAS at Gross Weight)	164/304

CRUISING SPEEDS	Best Power	Best Economy
(TAS at Gross Weight)		
Optimum Altitude		
High Speed Cruise Power - 75% (kts/kmh)	159/295	157/291
Economy Cruise Power - 65% (kts/kmh)	153/284	151/280
Long Range Cruise Power - 55% (kts/kmh)	144/267	141/261

CRUISE RANGE

(Cruising range includes 45-minute fuel reserve at long range cruise power plus allowance for fuel used during taxi, take-off, climb at MCP, cruise at optimum altitude and stated mixture and descent)

	Best Power	Best Economy
High Speed Cruise Power - 75% (nm/km)	784/1453	865/1603
Economy Cruise Power - 65% (nm/km)	828/1534	937/1736
Long Range Cruise Power - 55% (nm/km)	869/1610	983/1821

FUEL CONSUMPTION

	Best Power	Best Economy
High Speed Cruise Power - 75% (gph/lph)	18.0/68	16.0/61
Economy Cruise Power - 65% (gph/lph)	16.0/61	13.8/52
Long Range Cruise Power - 55% (gph/lph)	14.0/53	11.9/45

RATE OF CLIMB (At Sea Level and Gross Wt)

Full Throttle (fpm/MPM) 1010/308

STALL SPEED

Flaps Down Full 40° (kts/kmh) IAS CAS 57/106 59/108

Flaps Up (kts/kmh) 60/111 65/120

SERVICE CEILING (100 fpm) (ft/m)

16,700/5090

TAKE-OFF DISTANCE**2-Blade****3-Blade**

(Sea Level, Zero Wind, Standard Temperature, 25° flaps)

Ground Run (ft/m) 1183/361 1013/309

Total over 50 ft Obstacle (ft/m) 1759/536 1573/479

LANDING DISTANCE**Std. Brakes****H.D. Brakes**

(Sea Level, Zero Wind, Standard Temperature)

Ground Roll (ft/m) 732/223 650/198

Total over 50 ft obstacle (ft/m) 1612/491 1530/466