

## Air Data Specifications

### Altitude

	Accuracy			Repeatability		
	DPS350	DPS450	DPS500/ DPS501	DPS350	DPS450	DPS500/DPS501
-1800	±3ft	±3ft	±3ft	±1.4ft	±1.4ft	±1.3ft
10k	±4ft	±4ft	±4ft	±1.9ft	±1.9ft	±1.9ft
20k	±6ft	±6ft	±5ft	±2.6ft	±2.6ft	±2.5ft
30k	±8ft	±7ft	±7ft	±3.8ft	±3.8ft	±4.7ft
40k	±12ft	±12ft	±10ft	±5.7ft	±5.7ft	±6.0ft
50k	±19ft	±19ft	±16ft	±8.8ft	±8.8ft	±8.8ft
60k	±30ft	±29ft	±25ft	±15.4ft	±15.4ft	±15.0ft
100k**	N/A	N/A	±167ft	N/A	N/A	±100ft

\*\* Special Military Option.

### Airspeed

	Accuracy			Repeatability		
	DPS350	DPS450	DPS500/ DPS501	DPS350	DPS450	DPS500/DPS501
23	±2.0kts	±2.0kts	±2.1kts	±1.0kts	±1.0kts	*
50	±1.0kts	±0.5kts	±1.0kts	±0.5kts	±0.04kts	*
100	±0.5kts	±0.5kts	±0.5kts	±0.25kts	±0.25kts	*
200	±0.3kts	±0.3kts	±0.3kts	±0.15kts	±0.15kts	*
500	±0.1kts	±0.07kts	±0.1kts	±0.1kts	±0.02kts	*
650	±0.1kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	*
1000**	N/A	N/A	±0.1kts	N/A	N/A	N/A

\* Specifications not available at the time of printing

\*\* Special Military Option.

### Display

	Range			Resolution		
	DPS350	DPS450	DPS500/ DPS501	DPS350	DPS450	DPS500/DPS501
ALT.	-1.5k to 55k ft	±2.0kts	-3k to 105k ft**	1 ft	1 ft	1 ft
ASPD.	20 to 650 Knots	±0.5kts	20 to 850kts 20 to 1000kts*	0.1kts	0.1kts	0.1kts 0.1kts*
MACH	0.1 to 4.67	0.16 to 2.6	0.16 to 6.5	0.001	0.001	0.001
EPR	1 to 5	-0.1 to 10	1 to 10	0.001	0.001	0.001
ROC	100 to ± 20k ft/min	0 to 6k ft/min	0.1 to ± 15k ft/min	1ft/min	1ft/min	1ft/min
Ps	2.693 to 38inHg	1 to 40inHg	0.1 to 40inHg	0.001inHG	0.0001inHg	0.0001inHg
Pt	2.693 to 77inHg	***	0.1 to 80inHg 0.1 to 103.0*	0.001inHG	0.001inHG	0.001inHg 0.0001inHg*
Qc	0 to 55inHg	1 to 74inHg	-39.7 to 50.2inHg -39.7 to 73.8inHg*	0.001inHG	0.0001inHg	0.0001inHg

\* Specifications for DPS500/501 containing special high range airspeed option.

\*\* Pump capable of 80,000ft.

\*\*\* Specifications not available at the time of printing

**Barfield Inc.**  
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AIRCRAFT MAINTENANCE REPAIR OVERHAUL & SUPPORT

## Air Data Specifications Continued

	Accuracy			Repeatability		
	DPS350	DPS450	DPS500/ DPS501	DPS350	DPS450	DPS500/DPS501
Mach	±0.005 @ 0.10 decreasing to ±0.001 @ 1.0 and above	Better than 0.005	0.005	±0.001	0.001 to 0.005	*
Engine Pressure Ratio	± 1 Count of Display	Better than 0.005	±1 Count of Display	±1 Count of Display	±1 Count of Display	±1 Count of Display
Rate of climb	± 1% of Reading	±2% of Value	± 1% of Value	±0.5% of Reading	± 0.5%	± 0.5%
Ps Sensor	± 0.0030inHg	± 0.0030inHg	±0.0015 Rising to ±0.0030inHg	±0.0015inHg	0.0015inHg	0.0015inHg
Pt Sensor	± 0.007inHg	± 0.007InHg	±0.003inHg Rising to ±0.008inHg	±0.0015inHg Rising to ±0.005inHg	0.0015inHg Rising to ±0.005inHg	0.0015inHg Rising to ±0.005inHg

\* Specifications not available at the time of printing

## Other Specifications

	DPS350	DPS450	DPS500/DPS501
Stability (Calibration drift per 12 months)	0.01% of Range/Year (Max)	0.005% of Range/Year (Max)	0.01% of Range/Year (Max)
Calibrated Temperature Ranges	0°C to +50°C	5°C to +35°C	5°C to +35°C
Operational Temperature Ranges	0°C to +50°C	0°C to +50°C	0°C to +50°C
Storage Temperature Ranges	-20°C to +70°C	-20°C to +70°C	-40°C to +70°C
Dimensions (English Units)	9.76" H x 15.38" W x 14.87" D	14.0" H x 20.5" W x 10.4" D	13" H x 30" W x 17.5" D (DPS500) 10.5" H x 19" W x 12" D (DPS501)
Dimensions (Metric Units)	248mm x 391mm x 378mm	265mm x 520mm x 355mm	332mm x 762mm x 480mm (DPS500) 267mm x 483mm x 305mm (DPS501)
Weight (English Units)	35 lbs	33 lbs	77 lbs (DPS500) 29 lbs (DPS501)
Weight (Metric Units)	15.9 Kg	15 Kg	35 kg (DPS500) 13 kg (DPS501)
AC Power Requirements	47-400 Hz 115/230 VAC	90 to 132 VAC 47 to 440Hz 180 to 265 VAC 47 to 66Hz auto-selection 200 VA	88 to 260 VAC 47 to 440Hz 500VA
DC Power Requirements	N/A	N/A	OPTIONAL 24 - 30V DC

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