

Automated Pitot/Static and Air Data Test Set Specifications

Altitude

	Accuracy					Repeatability				
	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501
-1800	±7ft	±3ft	±3ft	±3ft	±3ft	±1.4ft	±1.4ft	±1.4ft	±1.0 ft	±1.3ft
10k	±10ft	±4ft	±4ft	±3ft	±4ft	±2.0ft	±1.9ft	±1.9ft	±1.0 ft	±1.9ft
20k	±14ft	±6ft	±6ft	±6ft	±5ft	±2.8ft	±2.6ft	±2.6ft	-	±2.5ft
30k	±20ft	±8ft	±7ft	±7ft	±7ft	±4.0ft	±3.8ft	±3.8ft	±2.0 ft	±4.7ft
40k	±30ft	±12ft	±12ft	±12ft	±10ft	±6.0ft	±5.7ft	±5.7ft	-	±6.0ft
50k	±48ft	±19ft	±19ft	±19ft	±16ft	±9.0ft	±8.8ft	±8.8ft	-	±8.8ft
60k	±62ft ⁽¹⁾	±30ft	±23ft ⁽¹⁾	±29ft	±25ft	±15.0ft	±15.4ft	±15.4ft	±15.4ft	±15.0ft
100k**	N/A	N/A	N/A	N/A	±167ft	N/A	N/A	N/A	N/A	±100ft

** Special Military Option. (1) 1811NG & DPS1000 @ 55,000 ft

Airspeed

	Accuracy					Repeatability				
	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501
23 Kts	±1.0kts	±2.0kts	±1.0kts	±2.0kts	±2.1kts	±1.0kts	±1.0kts	±1.0kts	±1.0kts	*
50 Kts	±0.5kts	±0.5kts	±0.5kts	±0.5kts	±1.0kts	±0.2kts	±0.5kts	±0.2kts	±0.04kts	*
100 Kts	±0.5kts	±0.5kts	±0.5kts	±0.5kts	±0.5kts	±0.2kts	±0.25kts	±0.2kts	±0.25kts	*
200 Kts	±0.3kts	±0.3kts	±0.3kts	±0.3kts	±0.3kts	±0.1kts	±0.15kts	±0.1kts	±0.15kts	*
500 Kts	±0.2kts	±0.1kts	±0.2kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	±0.02kts	*
650 Kts	±0.2kts	±0.1kts	±0.2kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	±0.1kts	*
1000** Kts	N/A	N/A	N/A	N/A	±0.1kts	N/A	N/A	N/A	N/A	N/A

* Specifications not available at the time of printing

** Special Military Option.

Display

	Range					Resolution				
	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501
ALT.	-1.5k to 55k ft	-1.5k to 55k ft	-1.5k to 55k ft	-2k to 60k ft	-3k to 105k ft**	1 ft	1 ft	1 ft	1 ft	1 ft
ASPD.	10 to 650 Knots	20 to 650 Knots	10 to 650 Knots	20 to 650 Knots	20 to 850kts 20 to 1000kts*	0.1kts	0.1kts	0.1kts	0.1kts	0.1kts 0.1kts*
MACH	0.1 to 2.8	0.1 to 4.67	0.1 to 2.8	0.16 to 2.6	0.16 to 6.5	0.001	0.001	0.001	0.001	0.001
EPR	0.1 to 10	1 to 5	0.1 to 10	0.1 to 10	1 to 10	0.001	0.001	0.001	0.001	0.001
ROC	100 to ± 20k ft/min	100 to ± 20k ft/min	100 to ± 20k ft/min	0 to 6k ft/min	0.1 to ± 15k ft/min	1ft/min	1ft/min	1ft/min	1ft/min	1ft/min
Ps	3.425 to 38 inHg	2.693 to 38inHg	2.693 to 38inHg	1 to 40inHg	0.1 to 40inHg	0.001inHG	0.001inHG	0.001inHG	0.0001inHg	0.0001inHg
Pt	2.693 to 78inHg	2.693 to 77inHg	2.693 to 78inHg	***	0.1 to 80inHg 0.1 to 103.0*	0.001inHG	0.001inHG	0.001inHG	0.001inHG	0.001inHg 0.0001inHg*
Qc	0 to +40inHg	0 to 55inHg	0 to +40inHg	1 to 74inHg	-39.7 to 50.2inHg -39.7 to 73.8inHg*	0.001inHG	0.001inHG	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



Air Data Specifications Continued

	Accuracy					Repeatability				
	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501	1811NG	DPS350	DPS1000	DPS450	DPS500/ DPS501
Mach	±0.005 @ 0.10 decreasing to ±0.001 @ 1.0 and above	±0.005 @ 0.10 decreasing to ±0.001 @ 1.0 and above	±0.005 @ 0.10 decreasing to ±0.001 @ 1.0 and above	Better than 0.005	0.005	±0.001	±0.001	±0.001	0.001 to 0.005	*
Engine Pressure Ratio	± 1 Count of Display	± 1 Count of Display	± 1 Count of Display	Better than 0.005	±1 Count of Display	±1 Count of Display	±1 Count of Display	±1 Count of Display	±1 Count of Display	±1 Count of Display
Controlled Rate of climb	± 2% of Value	N/A	± 2% of Value	±2% of Value	± 1% of Value	±0.5%	N/A	±0.5%	± 0.5%	± 0.5%
Ps Sensor	± 0.02% FS Typical, 0.040 FS Max	± 0.0030 inHg	± 0.0030 inHg	±0.1% reading ± 0.0037 inHg	±0.0015 Rising to ±0.0030inHg	±0.0015 inHg	±0.0015 inHg	±0.0015 inHg	0.0015inHg	0.0015inHg
Pt Sensor	± 0.002 inHg rising to ±0.020 @ FS	± 0.007 inHg	± 0.002 inHg rising to ± 0.020 @ FS	± 0.007 inHg	±0.003inHg Rising to ±0.008inHg	±0.0015inHg Rising to ±0.005inHg	±0.0015inHg Rising to ±0.005inHg	±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

	1811NG	DPS350	DPS1000	DPS450	DPS500/DPS501
Stability (Calibration drift per 12 months)	0.025% of Range/Year (Max)	0.01% of Range/Year (Max)	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	0°C to +50°C	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	0°C to +50°C	0°C to +50°C
Storage Temperature Ranges	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-20°C to +70°C	-40°C to +70°C
Dimensions (English Units)	14.8" H x 22.2" W x 9.0" D	9.76" H x 15.38" W x 14.87" D	14.8" H x 22.2" W x 9.0" 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)	376mm x 564mm x 229mm	248mm x 391mm x 378mm	376mm x 564mm x 229mm	265mm x 520mm x 355mm	332mm x 762mm x 480mm (DPS500) 267mm x 483mm x 305mm (DPS501)
Weight (English Units)	33 lbs	35 lbs	33 lbs	33 lbs	77 lbs (DPS500) 29 lbs (DPS501)
Weight (Metric Units)	15 Kg	15.9 Kg	15 Kg	15 Kg	35 kg (DPS500) 13 kg (DPS501)
AC Power Requirements	50-60 Hz 85-264 VAC Auto Selection 200VA	47-400 Hz 115/230 VAC	50-60 Hz 85-264 VAC Auto Selection 200VA	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	N/A	N/A	OPTIONAL 24 - 30V DC



Aero Express, Inc. is an Authorized Distributor of Barfield
www.aeroexpress.com 816-246-4500 sales@aeroexpress.com