



Helicopter Air Data Test Set

- [illegible]

MPS43H Standard Specifications

	PARAMETER		RANGE		RESOLUTION		ACCURACY ^[2]
			MEASURE	CONTROL	MEASURE	SETPOINT	
STATIC	Altitude	(ft)	-2,000→25,000	-2,000→25,000	1	1	± 3 @ SL ± 5 @ 20,000
	Vertical speed	(ft/min)	0→3,000	0→3,000	5 @ < 3,000 25 @ > 3,000 ^[1]	1	± 1% of setting
	Static	(inHg abs) (hPa abs)	11.1→32.15 376→1088	11.1→32.15 376→1088	0.001 0.01	0.001 0.01	± 0.003 ± 0.1
PITOT	Airspeed	Standard (kts)	0→300	0→300	1 @ < 50 0.1 @ > 50	1	± 0.5 @ 50 ± 0.15 @ > 200
	Airspeed slew rate	(kts/min)	0→300	0→300	10	10	± 10 ± 1% of setting
	Pitot (Qc)	(inHg diff) (hPa diff)	0→4.53 0→154	0→4.53 0→154	0.0001 0.01	0.0001 0.01	± 0.005 ± 0.17
	Engine Pressure Ratio	(EPR)	1→1.15@ SL	1→1.15@ SL	0.001	0.001	± 0.001

¹ Control capability on all load volumes: Static: 0 to 1.5 L (92 cu. in.), Pitot: 0 to 1 L (61 cu. in.). Larger volumes acceptable

² Selectable to ± 1 ft/min

² Total accuracy includes all metrological uncertainty contributions for the pressure measured. Metrological data has full traceability with International accredited Labs.

SAFETY

The MPS43H is designed for maximum safety during testing. Design features protect the test set and instruments under test. Negative Qc condition of Ps greater than Pt is always prevented. With loss of power the test circuit is safely isolated and can be manually vented preventing instrument and test set damage. Preset factory or user programmed, password protected, safe limit factors prevent damage to the instruments under test during operation.

STANDARD TEST FUNCTIONS

- Pressure/vacuum generation, internal pumps
- Automatic leak check
- Controlled venting to ambient
- Altitude/airspeed input for helicopter ranges
- Static/dynamic(Qc)/total pressure input
- Altitude/airspeed rates input
- TAS / IAS toggle , TAS temperature correction
- Altitude offset correction
- 30 user test programmed profiles of 26 steps each.
- Audible indication when approaching set point
- Various measure units selectable
- EPR generation

DISPLAY AND KEYPAD

Integral display and keypad in splash proof and shock protected front panel.
LCD multi-coloured backlit touch screen, 114mm (3.5") diagonal, displays all test parameters.

DISPLAYED UNITS

Altitude: ft, m, hm
Airspeed: kts, km/h, mph
Pressure: inHg, hPa, kPa, Pa, psi, mmHg, inH2O

CALIBRATION

One year interval, performed from front panel.

PHYSICAL SPECIFICATIONS

Weight: 4 kg. (8.8 lbs.)
Dimensions: L 300 x W 250 x H 120 mm
(L 11.8 x W 9.8 x H 4.7 in.)
Connections: Static: AN-4 37° flare
Pitot: AN-3 37° flare

Front ports fitted with O-rings for finger tight sealing. Captive dust caps supplied.

ENVIRONMENTAL

Temperature range
Operating: -5°C to +50°C
Storage: -20°C to +70°C
Splashproof and shockproof.
CE compliant.



POWER SUPPLY

Universal power supply: 90-240 VAC; 50-400 Hz.
20 VA

Rechargeable internal battery providing 30 minutes back up for safe shut down. For battery operation see the EPU6 under Associated Products.

WARRANTY

Unit: 2 Years
Pumps: 1500 hours or 2 years, whichever expires first.

OPTIONS

- A0 28 VDC
- A2 No internal battery
- B7 Gray Code Altitude Device Read-out
- F4 ADWIN PC Control software (unlocked)
- K0 AN4 (ps), AN3 (Pt)
- K1 AN4 (Ps), AN4 (Pt)
- K2 AN6 (Ps), AN4 (Pt)
- K5 Staubli red (Ps), Staubli black (Pt)
- T0 Power cable 2m Schuko plug
- T1 Power cable 2m American plug
- T2 Power cable 10m Hubbel HBL5266C
- T3 Power cable 2m Australian plug

INCLUDED ACCESSORIES

ADWIN PC Control software (MPS43/43H only)
USB cable
Power cable chosen from above options
Hoses and fittings

ASSOCIATED PRODUCTS

Pitot-static adaptors
EPU6 External battery power unit, providing 6 hours operation.
DMAKV2 Vacuum Source for adaptor hold down use.
Pressure indicators/transfer standards

Ongoing development results in specifications being subject to change without notice

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