

RPM4-AD™

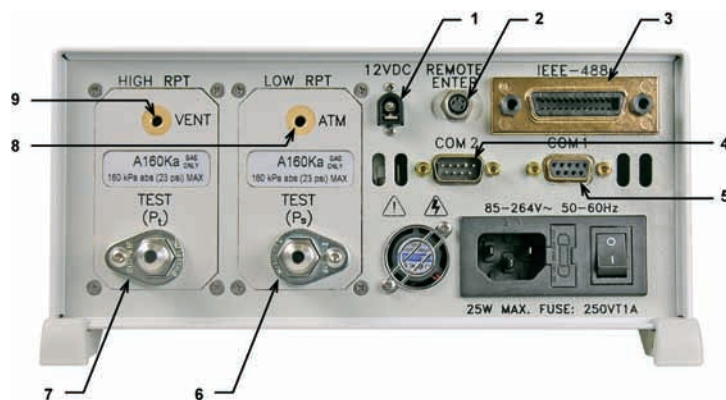
RPM4-AD™
Reference Pressure
Monitor, Air Data Version



FEATURES

- Covers the absolute and differential pressure ranges of typical air data instruments.
- Fixed wing and rotary wing range versions
- True Pt, Ps, Qc operation
- Transfer standard level measurement uncertainty
- Measures and displays altitude (ft, m), airspeed units (kts, mph, km/h, Mach) and in conventional pressure units
- Automated rate measurement with user specified sample time
- Automated leak check function
- Compact and rugged presentation
- SDS self defense system shuts off test ports to protect from overpressure
- RS232 and IEEE-488 interfaces included
- Battery pack available
- Ideal for validation of air data test sets (ADTS)

RPM4-AD™ REAR PANEL



1. 12VDC power supply connection
2. Remote [ENT] connector
3. IEEE-488 remote communications
4. COM2 pass through communications
5. COM1 remote communications
6. TEST (Ps), high Q-RPT
7. TEST (Pt), low Q-RPT
8. ATM port, atmosphere reference
9. VENT port, SDS vent

SPECIFICATIONS

	RPM4-AD A350K/A160K (fixed wing)	RPM4-AD A160K/A160K (rotary wing)
Range:	Ps 160 kPa (23 psia) Pt 350 kPa (51 psia) Qc 250 kPa (36 psid)	160 kPa (23 psia) 160 kPa (23 psia) 60 kPa (8.7 psid)
Altitude:	-4 000 to 30 000 m (-13 000 to 100 000 ft)	-4 000 to 20 000 m (-13 000 to 66 000 ft)
Airspeed (sea level):	0 to 2040 km/hr (1100 kts)	0 to 1020 km/hr (550 kts)
Power requirements:	85 to 264 VAC, 50/60 Hz and 12VDC, 1.2 A (battery)	
Operating temperature:	15 to 35 °C	
Weight:	5 kg (11 lb)	
Dimensions:	10 cm H x 22.7 cm W x 24 cm D (3.9 in. x 8.9 in. x 9.5 in.)	
Test port connections:	AN4 M	
Communications ports:	RS232 (COM1, COM2), IEEE-488.2	

MEASUREMENT SPECIFICATIONS

Resolution:	To 1 ppm, user adjustable	Acceleration Affect:	± 0.008 %/g maximum, worst axis Allows operation ± 20° from reference plane without significant effect
Warm Up Time:	30 minute temperature stabilization recommended from cold power up for optimum performance.	Predicted Stability¹:	± 0.005% of reading Note: the two Q-RPTs in RPM4-AD A160K/A160K can be compared one to the other to assist in identifying Q-RPT drift between calibrations
Operating Temperature Range:	15 to 35 °C		

RPM4-AD A350K/A160K (fixed wing)

	Ps Q-RPT (altitude)	Ps - Pt Q-RPT (Qc) (airspeed at varying altitude)	Pt Q-RPT
Precision²:	± 0.005 % of reading or 2.4 Pa, whichever is greater	± 0.005 % of reading or 5.25 Pa, whichever is greater	± 0.005 % of reading or 5.25 Pa, whichever is greater
Measurement Uncertainty³:	± 0.008% of reading or 3.8 Pa, whichever is greater	± 0.008% of reading or 6.6 Pa, whichever is greater	± 0.008% of reading or 8.4 Pa, whichever is greater

RPM4-AD A160K/A160K (rotary wing)

	Ps Q-RPT in parallel mode (altitude, airspeed at ground)	Ps - Pt Q-RPT (Qc) (airspeed at varying altitude)	Single Ps or Pt
Precision²	± 0.004 % of reading or 2 Pa, whichever is greater	± 0.005 % of reading or 2.4 Pa, whichever is greater	± 0.005 % of reading or 2.4 Pa, whichever is greater
Measurement Uncertainty³:	± 0.006% of reading or 3 Pa, whichever is greater	± 0.008% of reading or 3 Pa, whichever is greater	± 0.008% of reading or 3.8 Pa, whichever is greater

1. Predicted Q-RPT measurement stability limit (k=2) over one year assuming regular use of AutoZero function. AutoZero is performed by the operator: against zero pressure when vented in gauge mode, by direct comparison of one Q-RPT to the other at the line pressure in differential mode, by comparison with a barometric reference in absolute mode. Absolute mode predicted one year stability without AutoZ is ± (0.005 % Q-RPT span + 0.005 % of reading).

2. Combined linearity, hysteresis, repeatability. Add + 1 Pa (0.00015 psi) in gauge mode for the resolution and short term stability of the on-board barometer.
3. Maximum deviation of the Q-RPT indication from the true value of applied pressure including precision, predicted one year stability limit, temperature effect and calibration uncertainty, combined and expanded (k=2) following the ISO "Guide to the Expression of Uncertainty in Measurement."

ORDERING INFORMATION

Model: RPM4-AD A350Ka/A160Ka or RPM4-AD A160Ka/A160Ka

ACCESSORIES

Designation	Part No.	Description
Rack mount kit	401929	Rack mount kit for standard 19 in. rack
Footswitch	401886	Remote [ENTER] footswitch
MPC1-1000	401067	Single channel manual pressure controller
MPC1-D-1000	401646	Dual channel manual pressure controller

Designation	Part No.	Description
VA-MPC-REF, 110V	400922	Vacuum pump (110V) and connection for MPC1
VA-MPC-REF, 220V	401160	Vacuum pump (220V) and connection for MPC1
Case	402011	Molded transit case for RPM4 and battery pack

RPM4, RPM4-AD, Q-RPT and parallel measurement mode (//m) are trademarks, registered and otherwise, of DH Instruments, a Fluke Company.

Due to a policy of continual product improvement, all product specifications, descriptions and features are subject to change without notice.

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