RPM4 BA100K

Reference Pressure Barometer



The RPM4 BA100K is a full function laboratory quality barometer intended to measure atmospheric pressure with the very highest performance. Its outstanding pressure measurement specifications are made possible by DHI's exclusive quartz reference pressure transducer (Q-RPT) modules.

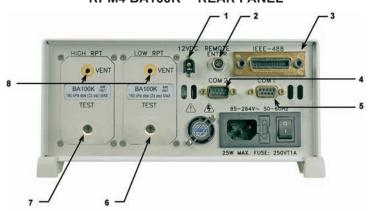
FEATURES

- Transfer standard level measurement uncertainty, ± 0.01% of reading (± 0.008% for dual channel mode)
- Single channel or dual channel with parallel measurement mode to reduce uncertainty and increase reliability
- · Large, easy to read display
- RS232 and IEEE-488 interfaces included
- On-board functions including adjustable average time, high/low, deviation from set point, rate, freeze
- A2LA accredited calibration included at no extra cost, internationally recognized through ILAC, APLAC, EA and IAAC



- Ideal for absolute pressure AutoZeroing of pressure transfer standards and molbox flow terminals
- · Compact and rugged presentation
- Optional battery pack
- · 1 week delivery from factory

RPM4 BA100K™ REAR PANEL



- 1. 12VDC battery connection
- 2. Remote [ENT] connector
- 3. IEEE-488 remote communications
- 4. COM2 pass through communications
- COM1 remote communications

- 6. TEST, channel 1 Q-RPT
- 7. TEST, channel 2 Q-RPT (optional)
- 8. VENT port, SDS vent

NOTE: RPM4 BA100K is a specific configuration of the RPM4 reference pressure monitor. See the RPM4 full brochure for additional information on RPM4 reference pressure monitors.



GENERAL SPECIFICATIONS

70 to 110 kPa (10 to 16 psia) **Power requirements:** 85 to 264 VAC, 50/60 Hz;

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: 1/8 in. NPT F

Communications ports: RS232 (COM1, COM2), IEEE-488.2

MEASUREMENT SPECIFICATIONS

RPM4 BA100K (Single Channel) RPM4 BA100K/BA100K (Dual Channel)

Normal Operating

Resolution: To 1 ppm, user adjustable **Resolution:** To 1 ppm, user adjustable Warm Up Time: 30 minute temperature stabilization Warm Up Time: 30 minute temperature stabilization

recommended from cold power up **Normal Operating**

Temperature Range: 15 to 35 °C **Temperature Range:** 15 to 35 °C

Vibration: Meets MIL-T-28800D **Acceleration Affect:** Meets MIL-T-28800D Predicted Stability¹: Predicted Stability¹: ±0.005% of reading ±0.0032% of reading Precision²: ±0.006% of reading

±0.008% of reading Precision²:

Measurement Measurement

Uncertainty 3 : $\pm 0.01\%$ of reading Uncertainty³: ±0.008% of reading

1. Predicted Q-RPT measurement stability limit (k=2) over one year assuming regular use of AutoZero function. AutoZero is performed by the operator by comparison with a barometric reference in absolute mode. Absolute mode predicted one year stability without AutoZ is: Single Channel ± (5 Pa + 0.005 % of reading), Dual Channel ± (4 Pa + 0.0032 % of reading).

2. Combined linearity, hysteresis, repeatability.

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."

recommended from cold power up

ORDERING INFORMATION

Model: RPM4 BA100K and RPM4 BA100K/BA100K

ACCESSORIES

Designation	Part No.	Description	Designation	Part No.	Description
Rack mount kit	401929	Rack mount kit for standard 19 in. rack	VA-MPC-REF, 110V	400922	Vacuum pump (110V) and connection
Footswitch	401886	Remote [ENTER] footswitch			for MPC1
Battery	401904	Battery and charger pack	VA-MPC-REF, 220V	401160	Vacuum pump (220V) and connection
Case	402011	Molded transit case for RPM4 and		for MPC1	
		battery pack	COMPASS for Pressure 401937		Calibration assistance software
MPC1-1000	401067	Single channel manual pressure controller			
MPC1-D-1000	401646	Dual channel manual pressure controller			

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

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