

Calibration

# Reference Pressure Barometer

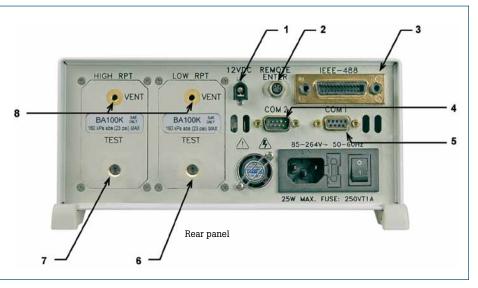
## **Technical Data**

### **Features**

- Transfer standard level measurement uncertainty,  $\pm$  0.01 % of reading ( $\pm$  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

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.





- 1. 12 V dc battery connection
- 2. Remote [ENT] connector
- 3. IEEE-488 remote communications
- 4. COM2 pass through communications
- 5. 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.



## **Specifications**

	RPM4 BA100K (Single Channel)	RPM4 BA100K/BA100K (Dual Channel)
Range	70 kPa to 110 kPa (10 psia to 16 psia)	
Power requirements	85 V ac to 264 V ac, 50/60 Hz; 12 V dc, 1.2 A (battery)	
Weight	5 kg (11 lb)	
Dimensions (H x W x D)	10 cm x 22.7 cm x 24 cm (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	
Resolution	To 1 ppm, user adjustable	To 1 ppm, user adjustable
Operating temperature	15 °C to 35 °C (59 °F to 95 °F)	
Warm up time	30 minute temperature stabilization recommended from cold power up	
Vibration	Meets MIL-T-28800D	
Predicted Stability <sup>1</sup>	$\pm$ 0.005 % of reading	$\pm$ 0.0032 % of reading
Precision <sup>2</sup>	$\pm$ 0.008 % of reading	$\pm$ 0.006 % of reading
Measurement Uncertainty <sup>3</sup>	$\pm$ 0.01 % of reading	$\pm$ 0.008 % of reading

<sup>1</sup> Predicted Q-RPT measurement stability limit (k=2) over one year assuming regular use of AutoZero function. AutoZero is <sup>1</sup>Predicted Q-RPT inestitement 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  $\pm$  (5 Pa + 0.005 % of reading). Dual Channel  $\pm$  (4 Pa + 0.0032 % of reading). <sup>2</sup> Combined linearity, hysteresis, repeatability. <sup>3</sup> 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 BA100K** Reference Pressure Barometer (Single Channel) **RPM4 BA100K/BA100K** Reference Pressure Barometer (Dual Channel)

#### Accessories

Rack mount kit Rack mount kit for standard 19 inch rack Footswitch Remote [ENTER] footswitch Battery Battery and charger pack MPC1-1000 Single channel manual pressure controller MPC1-D-1000 Dual channel manual pressure controller VA-MPC-REF, 110V Vacuum pump (110 V) and connection for MPC1 VA-MPC-REF, 220V Vacuum pump (220 V) and connection for MPC1 **COMPASS for Pressure** Calibration assistance software Case Molded transit case for RPM4 and battery pack

#### Fluke. Keeping your world up and running.®

Fluke Calibration

PO Box 9090, Everett, WA 98206 U.S.A. Fluke Europe B.V. PO Box 1186, 5602 BD

Eindhoven, The Netherlands For more information call: In the U.S.A. (800) 443-5853 or Fax (425) 446-5116 In Europe/M-East/Africa +31 (0) 40 2675 200 or

Fax +31 (0) 40 2675 222 In Canada (800)-36-FLUKE or Fax (905) 890-6866 From other countries +1 (425) 446-5500 or Fax +1 (425) 446-5116 Web access: http://www.fluke.com

©2010 Fluke Corporation. Specifications subject to change without notice. Printed in U.S.A. 6/2010 3128076B B-EN-N

Modification of this document is not permitted without written permission from Fluke Corporation.